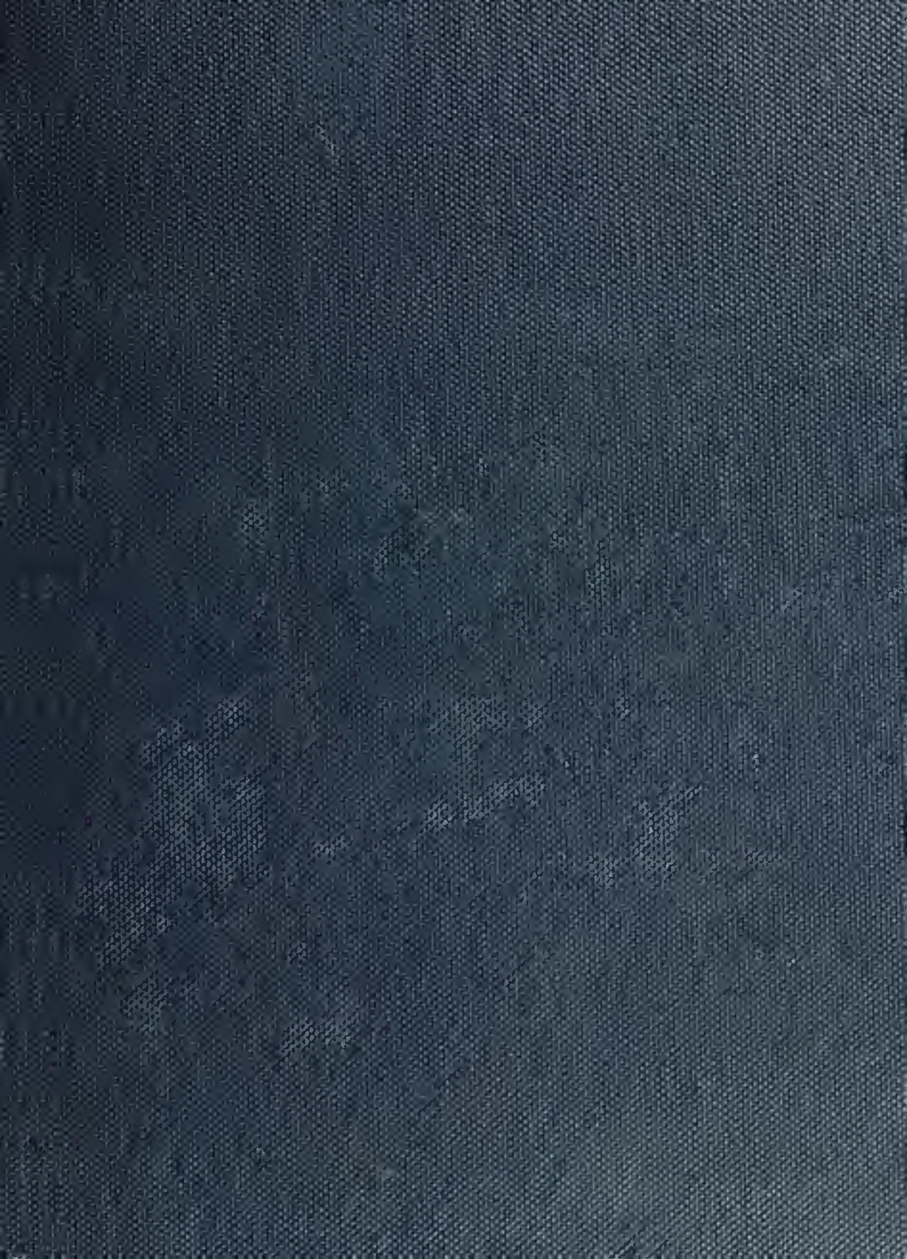



A MOUND OF MANY CITIES



GENERAL VIEW OF TELL EL HESY, SHOWING THE EXCAVATIONS.
*(From a photograph.)*

# A MOUND OF MANY CITIES

OR

*TELL EL HESY EXCAVATED*

BY

FREDERICK JONES BLISS, M.A.

NEW YORK
MACMILLAN & CO.
AND LONDON
1894



To

MY MOTHER



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# PREFACE

My object in writing this volume has been to present facts with as slight an admixture of theory as is possible. In Chapter VI. I have been obliged to offer a tentative chronology for the various cities unearthed; but I have shown in every case the method of my procedure from the facts, leaving to the reader the material from which he may form his own conclusions, which may differ from my own.

I would cordially acknowledge the assistance given me by Dr. Gladstone in analyzing the metals, by Professor Sayce in matters of epigraphy, by Mr. F. C. J. Spurrell in describing the flints, by Professor Alfred E. Day in studying the teeth, by Miss Cecilia Marshall and the Misses Jessup in the

drawings, and by Mr. Walter Besant and Mr. George Armstrong in seeing this volume through the press. In regard to the debt I owe to Dr. Flinders Petrie, I let the following chapters speak for themselves.

# A MOUND OF MANY CITIES;

OR,

# *TELL EL HESY EXCAVATED.*

## CHAPTER I.

### THE ANATOMY OF A TELL.

In the rolling country which lies between the foot-hills of the rocky Judæan mountains and the rich plain of Philistia, sixteen miles east of Gaza, a little to the north, and twenty-three miles west of Hebron, stands the mound called by the Bedawîn Tell el Hesy. A traveller approaching it from the north-west in the early spring of 1890 would have been struck by its singular appearance. Other tells or mounds he would have passed, rounded usually on all sides; but Tell el Hesy, while gently rounded at the west, would have appeared to him steeper on its north and south sides, but falling at the east almost

precipitously 120 feet to the stream-bed below. This stream-bed is the Wâdy el Hesy, joined a few hundred feet to the south-east of the tell by the Wâdy el Kuneitreh. At all seasons of the year the water collects in pools from the brackish springs in the bed of the watercourse, or stands in the purer basins scooped out to the depth of a few feet by the Arabs to reach the sweet water in other parts of the bed. Our traveller would have found the top and the west slope covered with a crop of barley, while the east slope was a tangle of weeds and small bushes down to the rocky cliff of sandstone, some forty feet above the stream-bed.

A traveller of some 4,000 years ago, however, would have found no lofty hill commanding a view on every side, but only a bluff some 60 feet above the stream-bed, with a rolling country beyond. The visitor to the place to-day finds still another appearance, which is, indeed, a combination of the other views. At the south and west the tell still preserves the high rounded sides it had in 1890; but its north-east quarter appears as it did 2000 B.C., at the level of the bluff above the river-bed.

These various appearances of the place are easily explained. Some 2,000 years before Christ, the Amorites built a town on the bluff, 60 feet above the stream, and on the ruins of this city their successors built another. This rebuilding on the

ruins of predecessors went on century after century until about 400 B.C., when the site seems to have been abandoned, the ruins of the last inhabitants being 60 feet above the ruins of the first builders, with a whole series of towns between them.

Some twenty-four centuries passed, and all apparent traces of the lofty buried city had disappeared; denudation had done its work, leaving a rounded surface which was sown and yielded a rich crop of wheat or barley or beans. Between April, 1890, and January, 1893, the officers of the Palestine Exploration Fund excavated at the site, and the restoration of the original level of the city at its north-east quarter was the result of their work.

This work was begun in April, 1890, by Professor Flinders Petrie, whose ten years' experience in Egypt had given him such a familiarity with antiquities of various ages that, in a rapid reconnaissance of six weeks, during which he examined the tell merely at its sides, he was able to reconstruct its past history from the apparently unimportant remains he found, and to reach conclusions which my detailed examinations through four seasons, during which I cut down one third of the mound, layer by layer, merely modified, but did not materially alter.

Before entering upon a detailed account of the excavations, I must explain the construction of a tell.

So difficult has it always been for people to imagine the existence of a pile of cities, the second built on the ruins of the first, the third on the ruins of the second, and so on to the number of a dozen, that, after Dr. Schliemann's books had been before the public for years, with their description of the seven superimposed cities of Troy, he felt it necessary as late as 1890 to invite a representation of *savants* of different nations, who testified that he had found there a vertical series of cities, truly inhabited at successive periods, and not a mound used in different ages for cremation.

This scepticism is not unnatural. The conditions for the formation of a tell are peculiar to the East. To form a mound, in appearance an ordinary hill, in reality a mass of ruins, requires, first, an immense duration of time; and, second, a peculiar material for its construction. Tell el Hesy is 60 feet high, and it took over twelve centuries to attain its growth. How many centuries of rain and wind and decay it required after its final desertion to get its rounded top and sloping sides, counterfeiting an ordinary hill of nature, who can say?

As Professor Petrie points out, cities in England have not been deserted since the Saxon invasion, and the cities then abandoned had existed for only a few centuries, so that Silchester or Pevensey shows but a slight depth of accumulations. Quite as important

as time is the material. When a house of burnt brick or of stone falls to ruin, if the site is to be used again, either the old materials are reused on the old foundation, or the whole must be razed to the ground and a new start made; in neither case does the second building stand much higher than the first. If a wooden city is burnt, only a small amount of accumulation results. The raising of the ground on the sites of old cities in England is largely due to the wattle and daub huts common in mediæval times. However, we have an analogy close at hand which may help to bring the Eastern tells before our imagination. 'We have our tells,' says Professor Petrie, 'only we still live on the top of them. Whenever any deep digging is done in the City, we work through 20 or 30 feet before we arrive at the native soil. We are, then, working through the tell of London. At the top of it we see our modern roads and foundations, and bits of modern plates and dishes; then layers of dirty black earth and brick-bats, perhaps relics of the Great Fire; below that may be a gray-beard jug, then a bit of Norman zig-zag moulding, next a stray penny of Alfred, and below that a bit of Saxon walling patched up from Roman tiles. Then we come to the massive walls of Roman tile, and concrete, and pieces of Samian ware, and, below all, perhaps, a bronze sword of the ancient British warrior. And what has made up all

this depth of accumulation in the last 2,000 years? We see it to be mainly dust, earth, more or less organic matter, and the fragments of successive buildings, the ruins of each of which were levelled the one after the other to make room for the next structure.'

In the East, from the earliest times buildings have been constructed of sun-dried bricks, blocks of mud of varying fineness and symmetry held together by chopped straw; and to this apparently rude and crumbling material we owe the preservation of ancient cities. Some 2,000 years before Christ, the Amorites built a city of these sun-dried bricks on the bluff 60 feet above the Wâdy el Hesy. After some time, either as the result of war or of decay, the mud houses fell to pieces. Let us suppose that the walls of a certain group of houses were originally 12 feet high, and that, after a siege, 8 feet of walling fell, part inside the rooms and part outside into the streets. What was the result? Streets and rooms alike were filled with fallen earth, which buried on either side the 4 feet of walling that remained. A man of the next generation, choosing to build on the same site, found no confused heap of fallen stones to be removed at great difficulty, but only a rude platform of earth which there was no need of clearing away, but which, indeed, made an excellent foundation. Accordingly the door-sill of his house stood

4 or 5 feet above the ruined door-sill of his predecessor, and his house stood 65 instead of 60 feet above the stream.

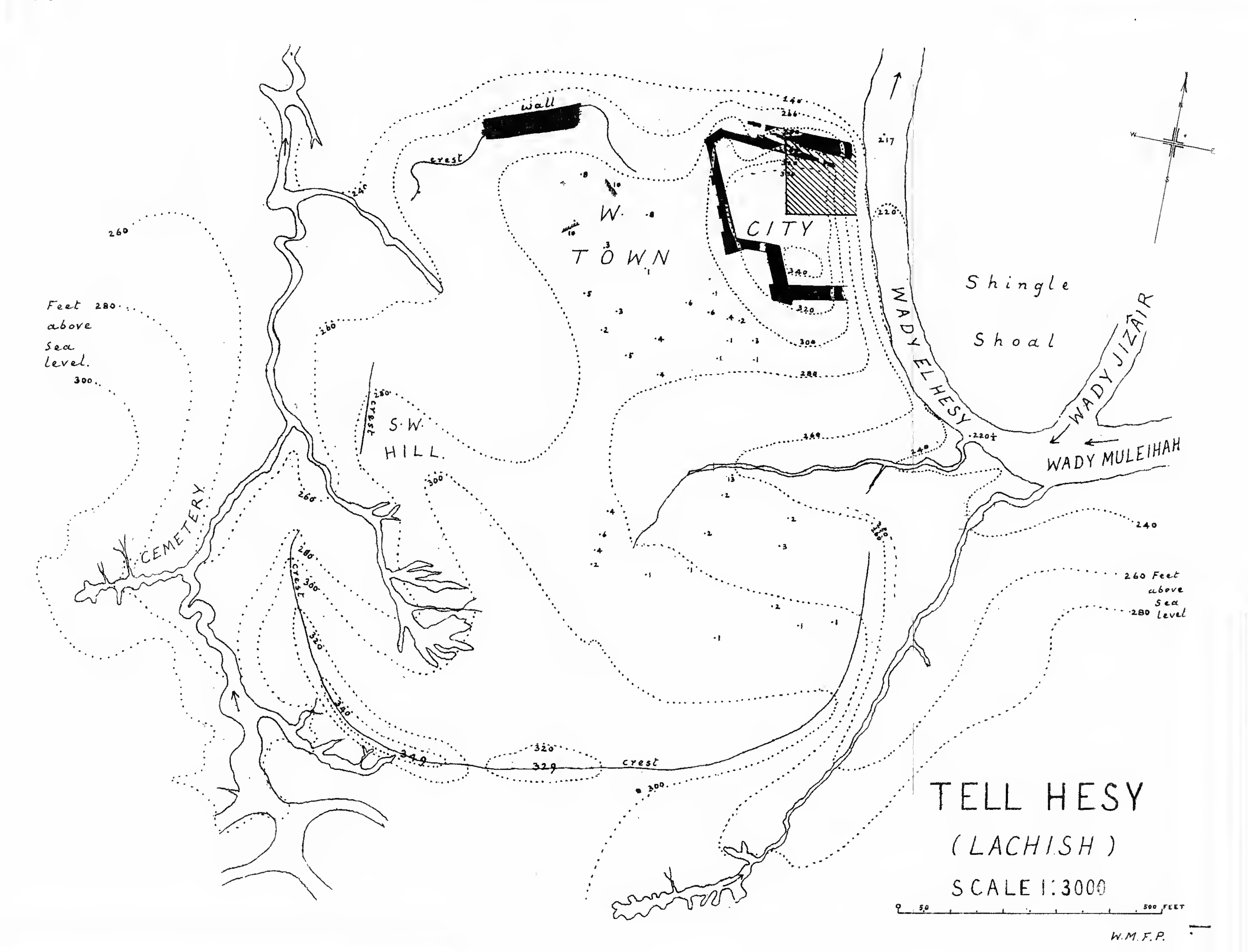
Take another group of houses of this first Amorite town. Perhaps these may have escaped the ravages of war. Their history, then, was longer. But their inhabitants, like the Fellahîn of Palestine to-day, threw all their refuse into the streets, the level of which was gradually raised 2 or 3 feet by an accumulation of bones, organic matter, and waste of all kinds. When the house fell into natural decay, and the children of the first generation wished to rebuild, they naturally raised the flooring to the level of the streets by letting the partially-ruined walls fall in, leaving 2 or 3 feet of walling buried by this débris inside and by the refuse in the streets outside. Hence the level of the whole city became raised about 5 feet in a century.

Having thus understood how the ground-plan of the lowest city might be preserved under the buildings of the second city, we need only to imagine a similar ruin of the second city, which in turn should form the foundation of the third, and so on to the eleventh or highest city, which, in the fourth century before Christ, crowned a lofty hill 120 feet above the stream, having nine cities between itself and the first Amorite buildings, which were but 60 feet above the stream. Incredible as this may seem,

it is explained by the simple reasons advanced above. This vast accumulation represents the entire waste of twelve or more centuries. There was no dustman in those days; no scavenger went his daily rounds. The houses fell down, but, being merely earth, were allowed to remain; heaps of débris and waste were formed, and these were levelled down to make a public place, or to serve as the bases of houses, for we sometimes find walls built down into débris.

We will now take the reverse order, and show how we actually found the different city-bases. As the importance of Tell el Hesy from an archæological point of view was not yet proved, and as to remove the whole hill would have involved an immense expenditure of time and money, I decided to cut down one-third. The top was covered with a crop of beans.

We first had to remove the beans from the plot, about 100 feet square, at the north-east part of the tell. I then divided the plot off into squares of 10 feet, numbered each square, placed about thirty men in thirty different squares, and gave the order to dig. Rude Arab graves and rough stone buildings with much pottery were all we found in the first 2 or 3 feet. But at a depth of 4 or 5 feet a man announced that he thought he had found a mud-brick wall. He was told how to trace it, and soon another man announced a mud-brick wall in


wall
crest
W. TOWN
CITY
S.W. HILL
crest
CEMETERY
crest
crest
WADY EL HESY
Shingle Shoal
WADY JIZAIR
WADY MULEIHAH
Feet above Sea level.
260 Feet above Sea level
TELL HESY
(LACHISH)
SCALE 1:3000
500 FEET
W.M.F.P.

his square. This was found to be in line with the first man's discovery, and they were told to work towards each other, and they soon proved that they were uncovering the same wall. In the cases of lower cities, which being protected from the surface-moisture were less decayed, sometimes three different men would find within a short time three walls, which would prove to be of the same house.

If, however, we had been left to find the base of this highest city by tracing its much-decayed walls, we would have remained uncertain as to the line between it and the one below, but, fortunately, we had another guide. Scattered all over this city were pit-ovens, common in Palestine to-day, which gave within a foot or two the level of the base of the city. When all remnants of this highest city (or City VIII. in the order of cities planned, numbering from the bottom) were cleared away, we found City VII., with its fine range of rooms, directly under several of the pit-ovens, which proves conclusively that these rooms had been entirely ruined and buried in their own débris, in which the inhabitants of the higher city dug the pits for their ovens.

It is easy to see how we found the base of City VII., as the rooms were so carefully preserved, but it will be interesting to show how we found the rooms themselves. All traces of City VIII. had been cleared away, and again we had a smooth

platform to explore, 5 feet lower than the first. Again we measured off the squares. A man in a square to the north-east was found curiously handling some burnt stuff, which proved to be barley. He said there was a lot of it. I told him to follow up the barley, and he soon found it coming to an end at a burned wall. Starting with this clue, he easily found the base of the wall, then followed it to a corner, and thus cleared out room B. This done, the next step was to find the thickness of the wall, which brought us into room A. This was in turn cleared out. And so the whole series of nine rooms was gradually unearthed. It was days, however, before we could find rooms F and G. These had not been burned, and were filled not with waste and débris, but with fallen brickwork from their own walls, very difficult to distinguish from the walls in place. We had to work most carefully, for fear of destroying a wall. Fallen brick may be known in many ways; if it has been washed by rain, the straws are parallel instead of crossing; worm-moulds are another indication; scattered bits of potsherds, another. But sometimes all these signs fail, and we have to pick away carefully until we find a bit of a face of a wall actually in place, taking care not to be deceived by the face of an inner course of brick, or by a mass of fallen brick which has preserved its face in a fallen position.

Once having found a bit of real face, we approached it, a little further on, through the outside earth, and as we got nearer gave a sharp tap of the pick, when the fallen stuff, hardly distinguishable by the eye from the brick in place, would fall off from a face of solid walling. When, in removing this city to get at the city below, we broke up the walls, we obtained further proof, for then the individual bricks appeared. Indeed, when we left walls standing for some time, the exposure to the sun would bring out the joints, and sometimes show us where we had made a mistake in leaving standing a mass of earth that was not brick.

In tracing these walls it was necessary to preserve a sceptical attitude, and never to assume a connection between walls where a careful and wearisome inspection could prove the face along their whole length. In my plans I have usually given only the walls of buildings which still preserved some symmetry, indicating by dotted lines only those connections which could be undoubtedly assumed. All doubtful wallings, and most of the unconnected wallings, I have left out; so that my plans represent the remains of rooms through which the reader could have walked, had he been at Tell el Hesy before each one was removed. In other words, I give the minimum of my results.

In this opening chapter I am trying merely to give

a general idea of the way we found the pile of eight cities figured in the plans, and how we proved their succession. Under City VII. we found a great mass of débris, and we dug almost 10 feet before we came to City VI., or the third city from the top. But only 4 feet under the base of the rooms of this latter city a man came on a large roughly-squared stone, and a few minutes after another stone was found 3 feet to the south, and soon another, 3 feet to the north. Here there was plainly a line of stones; but what was the meaning of the next one, found 8 feet to the west? Hardly had we uncovered that, when two more stones, respectively 3 feet to the north and south of it, showed their heads—another line and parallel to the first. And so this fascinating structure of parallel walls and stones leisurely revealed itself, as if in no hurry to see the long-lost light of day, until tape-measure and prismatic compass gave us the ground-plan of City V., only 4 feet under City VI., which for centuries had overlaid it.

The walls of the large building in City IV. were traced by the bed of yellow sand which lay exactly under them, never extending either into the rooms or into the streets.

The ruins of the rooms against the city walls of City III. were covered by the great bed of ashes, though the city walls were not. City III. was im-

mediately above City II., and had used one of its walls as a foundation. Between City II. and City I. there were indications of a much-ruined city, in which the brick used was much darker, quite distinguishing it from the two between which it lay.

I have given eight plans, because the remains (after the highest) all showed traces of symmetrical rooms, but I recognise eleven cities. The great city wall in City I. shows at least two rebuildings. I shall call the original structure City Sub I., and the rebuildings City I., and the houses of the city correspond to this division, being, though not complete enough to plan, in two exclusive periods. The remains between City II. and City I., already referred to, I call City Sub II. There was also much building between the base of City IV. and the ash-bed, to which I shall refer as City Sub IV. These make up the number to eleven.

This distinguishing of cities is most important in classifying the finds. Having proved that in general the tell lies in unbroken strata, we may assume that the objects found in each stratum are probably in the place where they were left by the ancients. This must not be pushed too far, for broken pottery might be dug up from age to age in searching for foundations, and find its way up in the mound. Then in the ancient digging of pits or trenches objects of a certain age might very easily fall to a level belonging,

in general, to several centuries earlier. The possibility of such exceptions I had to bear constantly in mind; but I carefully noted the objects which belonged to the various levels, and a comparison of these with each other revealed not only a similarity in objects of the same class in each level, but a change in the form and nature of objects from city to city, sometimes gradual and sometimes sudden. Of the objects which could be dated, the most recent were in the top levels, the most ancient in the lowest, and those of intermediate age in the central layers. These not only helped us to date the objects associated with them, but furnished a key to the chronology of the whole tell, as the probable rate of accumulation became evident.

As in order to reach any given city we had to remove the remains of the city above, it will be asked what evidence has been left at the tell of the various levels, the determination of which depended chiefly upon the buildings removed. Apart from the two-thirds of the hill left standing, which on detailed examination would reveal the same periods, there are a few indications left, which any traveller may find in the cliffs at the south and west of the excavations, while the great tower in City I. remains under the soil with which we re-covered it. A prominent feature in the cliffs is the great bed of ashes between City III. and City IV. In the south cliff may be

EASTERN FACE OF TELL HESY.

1:600

Feet 340 330 320 310 300 290 280 270 260 250 240 230 220

South

North

GLACIS

P

SECTION EXCAVATED BY F. J. B.

LAYERS OF ASHES

STONE STRATUM

Well

Stream Level.

Stream Level

Feet

340

330

320

310

300

290

280

270

260

Well

City VIII Depth 5 ft

City VII „ 8 ft

City VI. „ 18 ft

City V. „ 22 ft

City IV „ 32 ft

Ashes

City Sub IV. „ 37 ft

City III. „ 45 ft

City II. „ 48 ft

City Sub II. „ 53 ft

City I. „ 56 ft

City Sub I. „ 65 ft

Native Clay & Sand

ENLARGEMENT OF SECTION EXCAVATED BY F. J. B.

SHOWING LEVELS OF CITY BASES

1:300.

seen a section of mud-brick walls built into trenches made in this bed. On the plan of City IV., the south-west corner of the building may be seen to extend beyond the limit of excavation. This corner of the wall may still be found in the west cliff, about 35 feet from the top. A remnant of wall (o) in City V. may be also seen on the west cliff, some 25 feet from the top. In the angle made by the south and west cliffs will be found decayed brickwork belonging to a ruined house of City VIII. directly under the top of the tell.

For a full account of Professor Petrie's reconnaissance I refer the reader to his book;* but, as many have already gathered an idea of Tell el Hesy from that work, I repeat here his map and section, with lines showing how my work joined on to his.† He found on the east slope that a clear section of the city had been cut open by the scouring of the torrent, so that he could work in all levels at the same time. The top of the hill he did not touch, as it was covered

* 'Tell el Hesy' (Lachish), by W. M. Flinders Petrie. London: Published for the Committee of the Palestine Exploration Fund by Alexander P. Watt, 2, Paternoster Square; 1891.

† On his map (Plate I.) I have shaded the north-east part of the mound (marked 'City') to indicate the area of my excavations. On his section (Plate II.) I have laid heavy black lines, showing the limits of my work. His walls I prefer to leave untouched, as the book will show any difference between his results and my more detailed observations. Below his section, on Plate II., I add an enlargement of my part of the section, showing the levels of the cities which I unearthed.

with crops. A glance at his Plate II. will show that the tell is divided into two parts by a great bed of ashes. A study of the walls and of the pottery of different levels led him to the following general conclusions:

*First:* The earliest dwellings are not later than the seventeenth century B.C., and the latest belong to the fifth century B.C.

*Second:* The great walls below the level of the ash-bed belong to the pre-Israelitish or Amorite times. The stones below the bed of ashes belong to the rude period of the Judges. The ashes represent a desolation when the tell was used by alkali-burners. The buildings above the ashes represent the cities of the various Jewish kings to the time of the Captivity.

*Third:* The identification with Lachish, originally proposed by Major Conder, was adopted for the following reasons: (1) The importance of its water supply, as it commands the only springs in the region, except those of Tell el Nejileh, 3½ miles to the south; (2) its position, for it corresponds in general with the account in the 'Onomasticon' of the location of Lachish, which was in the district of Daroma, which is the Shephelah or low country, 7 miles from Eleutheropolis (Beit Jibrin), Tell el Hesy being about 10 miles from that place; (3) the correspondence of the remains in the tell with the historical notices of Lachish.

The ancient name of Lachish, he thought, had been preserved in the later ruins of Umm Lakis, 3 miles to the north-west, perhaps occupied by the Jews when they returned from the Capitivity, too feeble to retake the more important site.

I need not say that my work was greatly facilitated by the knowledge gained in Professor Petrie's reconnaissance.

## CHAPTER II.

### THE FIRST CITY.

A GLANCE at the plan drawn by Professor Petrie of the environs of Tell el Hesy (Plate I.) will show how admirably suited the site has always been for a city. On the east the ground rises almost abruptly from the wâdy 60 feet to the plateau, which forms the base of the artificial mound. On the north the fall of the plateau is almost 40 feet. The south and south-west are protected by a steep ridge, while on the west we may notice the continuation of the ridge and the deep watercourses. This natural enclosure is about a quarter of a mile across. A few feet of soil above the natural clay in the fields to the west of the mound show that these parts were included in the first settlements, and the crest at the south-west is still surmounted by an earth-rampart, belonging to these earlier cities. The later generations confined their building to the north-east corner of the enclosure, where the hill gradually

grew to a height of 60 feet above the plateau, 120 feet above the stream, and 340 feet above the sea.

As seen on Plate I., the mound is at the top about 200 feet long at its east face, and about the same along its north face (which will be seen to run somewhat north-west), while its south end is not as broad. At its base the north and east dimensions are somewhat under 400 feet, the south end being proportionately less. On Plate II., at the centre of the east face, may be seen the point marked 'Well.' When I began work at the top I drew a line from this point 100 feet to the west, and from thence a line about 120 feet long somewhat north-west to the northern slope. Between these limits I cut down the hill layer by layer, till I reached the clay of the original plateau. As the hill is so much narrower at the south end, it will be seen that in my work at the north-east part I removed more than a quarter of its bulk, more nearly one-third. As said before, my eight plans represent the ground-plans of eight out of eleven layers—namely, those where the remains were clear enough to measure. As, owing to its slope, the base of the hill is so much broader than the top, the plan of City I. naturally represents a larger area than the plan of City II., which indicates a stratum in places 17 feet above the base of City I. City II., being only 3 feet under City III, has about the same

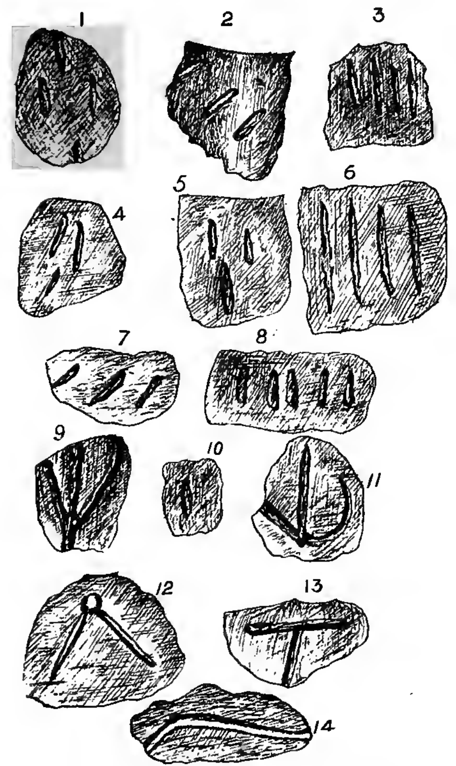
dimensions; but City IV., being some 15 feet higher than City III., occupies less area, and so on to the top. The wavy lines at the north and east of each plan represent the edges of the tell.

The south and west limits of the excavations had not that geometrical precision indicated by the lines in the plans, as variation from the straight line occurred in making different allowances for batter, and in leaving untouched some corners, the representation of which would have been unedifying, and would only have confused the plans.

It may be noticed, as we run through the plans from the lowest city to the highest, that the length from north to south of the areas worked decreases more rapidly than the breadth from east to west. This is owing to the gentler slope at the north, as well as to the fact that the south limit of excavation kept practically the same, leaving at the close of the work a sharp cliff at that end; while at the west the tendency was to bring the limit of work eastwards, so that the wall of tell left on that side is much more sloping.

In order to fix a point to show the reader how the plans may be laid one upon the other, as well as to indicate how they may be fitted on to Professor Petrie's plans, I mark in each plan the point 'Well' referred to before. As I did not find it running down through the lower layers, I am inclined to regard it

as a deep pit. I employ the word 'Well,' as it occurs on Petrie's plate, and it is convenient to assume that it thus descended, as it gives a point




MARKS ON FRAGMENTS OF POTTERY.

from which we can measure both vertically and horizontally.

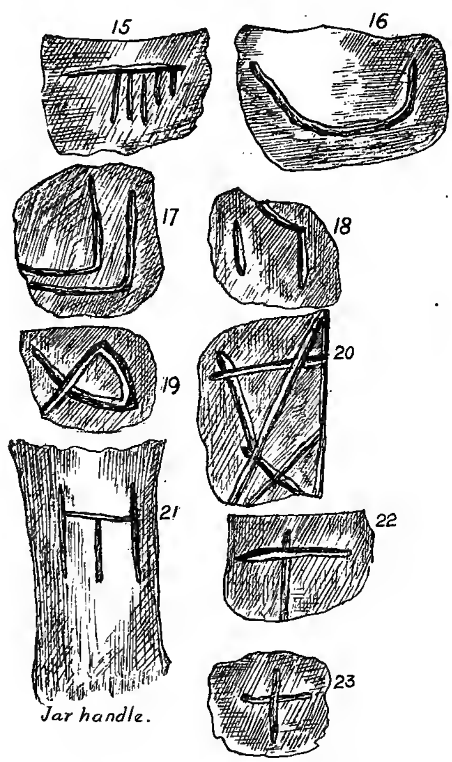
The depth of the various city-bases under the top of the mound is always measured at the north; the

difference between any two levels at the north will give in general the amount of accumulation between the two city-bases which they represent, although, of course, this varies at different points of any given city.

Although, for some reasons, it would be more convenient to take the cities in the order of my finding them, beginning at the top, I shall follow the chronological order, and begin with the earliest or lowest city, which of course was uncovered last.

This first settlement spread over an area nearly a quarter of a mile square. On Plate I. Professor Petrie marks in feet the depth of the soil in which he found walls and pottery contemporaneous with the oldest remains in the tell. Before commencing work at the tell itself (marked 'City' on Plate I.), I spent a week in the northern part of the 'West City,' making thirty trenches, and turning up much pottery, chiefly of the oldest periods. The greatest depth of soil I found was 17 feet, a little north of the higher point marked '10' by Petrie. I identified the great wall marked on his plan, and agree with him that it was probably a continuation of the lowest wall at the north of the 'city,' and that the chief buildings in this 'West City' were within this great wall. To trace the course of such buildings we made many attempts. Brickwork full of straw was often found, and great care was used in

trying to determine its face and direction; but though repeatedly we thought we had found a wall in position, further examination always proved it



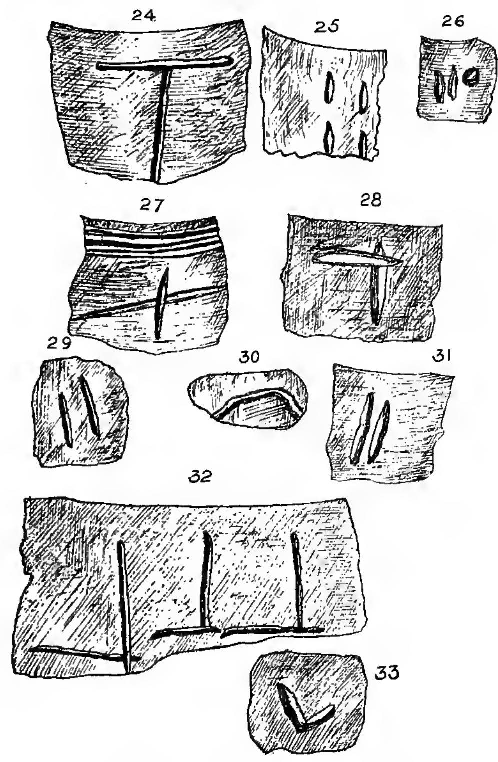

MARKS ON FRAGMENTS OF POTTERY.

nothing but consolidated ruin and decay. There were many signs of building, while some of the ruins seemed to be the result of overthrow. I finally dug a pit $27\frac{1}{2}$ feet by $19\frac{1}{2}$ feet at the top, and

about 12 feet deep, where we reached the clay, hoping that by thus uncovering a larger area we might attain more satisfactory results. A study of the sides of this hole revealed a curious, irregular stratification, with lines of brick, rough stonework, burning, and decay, which indicated three or four successive periods. The brickwork was so ruined that no order could be evolved. At a depth of 8 feet we found a fragment of a clay tray, with a rim an inch or two high, and a diameter of about 4 feet. It has a red face, with the Amorite burnishing in crossing lines described later. It was evidently in position, as it lay in a bed of mud. It was probably a place for baking bread; a fire of twigs to be kindled in one part of it, and the dough to be placed on the other, or else to be placed on the heated tray, and then covered with embers—a method of the Tawdrah Arabs to-day, though they bake on the sand. At the bottom of this pit, dug in the native clay, there was a square hole like a grave, about 3½ feet deep, filled with decayed brick.

The disintegration of the ruins in this 'West City' finds its analogy in the ruins of the last settlement at the top of the tell. In both parts the surface moisture has been percolating down for over twenty centuries, while the 'West City' has been subject to this destroying agency for several centuries longer. The better preserved condition of the part

of the first settlement under the tell is due to the protection of the tell itself, which immediately after its destruction began to grow above it.



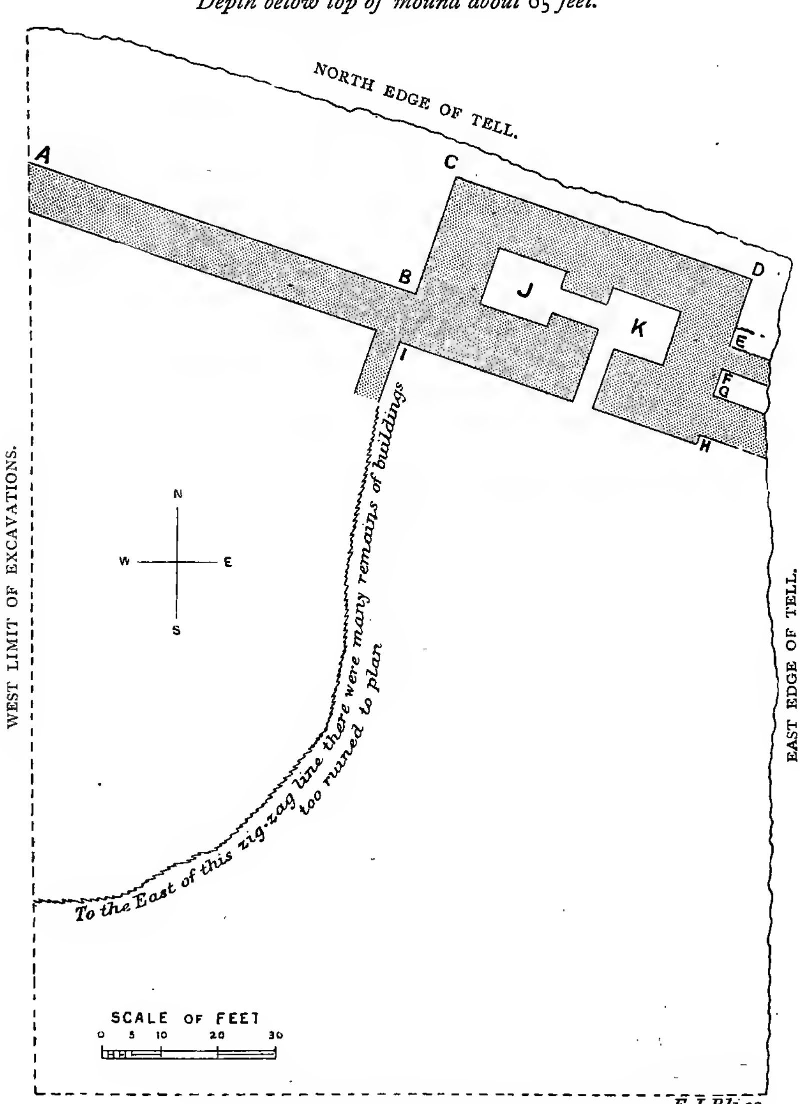

MARKS ON FRAGMENTS OF POTTERY.

From the depth and character of the accumulation, as well as from the pottery found in this 'West City,' I conclude that only the first three or four settlements extended here, probably to the period of

PLAN OF EXCAVATIONS AT NORTH-EAST QUARTER OF TELL EL HESY.

CITY I.

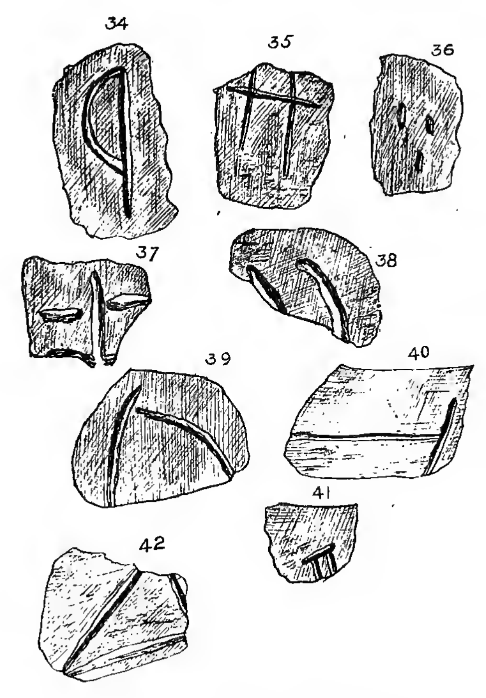
*Depth below top of mound about 65 feet.*



the great bed of ashes, that prominent stratum in the tell. The later settlements were confined to the small area of the tell.

I must now describe the condition of the ruins of that part of the earliest city reached in my great excavation, which was about 160 feet long from south to north, and 125 from west to east, and which was 65 feet below the top of the mound at its north-east quarter. The most prominent feature of these ruins was the northern wall figured on the plan of City I. When Petrie was working there, 65 feet of tell were imposed on this city, but the wall from D to H, being near the edge of the tell, was easily uncovered, and correctly measured by him at 28 feet 8 inches. It must be remembered that a good part of the tell has been undermined and carried away in former ages by the encroaching of the stream. On the plans of Cities I., VI. and VII. walls may be seen broken off at the east edge. How much has gone cannot be estimated, but as walls must have defended the city at the east, as well as on the other sides, and as at no level were any signs left of such east walls, we may assume that at least 25 feet of the breadth of the tell has disappeared. Dr. Petrie, accordingly, finding no good face along D—H, naturally assumed this to be the breadth of the wall worn away at this point. At D he made a trench following the wall 50 feet to the west, within 6 feet of my

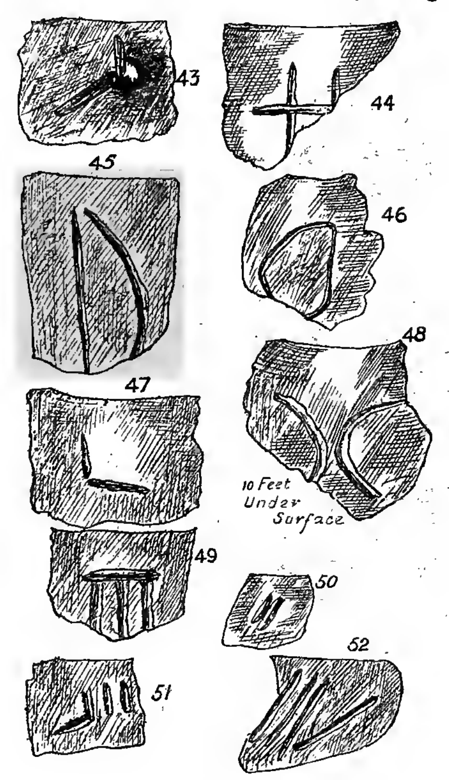
point C, and, as a cutting further on revealed a wall in line, he assumed that the great wall, whose thickness he had measured at D—H, ran without deviation along the north side. Had he gone 6 feet




MARKS ON FRAGMENTS OF POTTERY.

further he would have found the corner C. At D we went down 4 feet below the marks of his digging, and found a perfect corner resting on the original sand, and a perfect face going south along the line D—H, also deeper than his digging. The base of

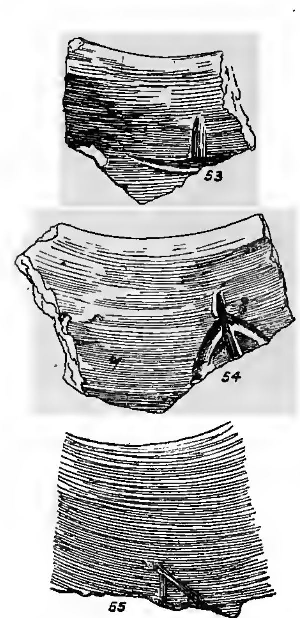
this wall rose as it went south. This lower part of the face had been preserved by a strengthening wall on the outside, consisting of large rough stones




MARKS ON FRAGMENTS OF POTTERY.

in a parallel line about 3 feet away, with the intervening space filled in with pebbles. This revetting ran under the walls E—F and G—H, which were much ruined down, and which Petrie may have

taken for a part of D — H. These walls were probably connected by a filling, so as to form one solid wall carrying on the fortification to the east. Petrie was thus correct in assuming that a wall ran on to the east, but its thickness turns out to be only 16 feet.



MARKS ON FRAGMENTS OF POTTERY.

The unearthing of the great tower (I C D H) proved highly interesting. First we came upon the interior of room K, which had been very much burned in three or more periods, as shown by its reddened and blackened walls, clearing it out to a depth of 14 feet. On first coming to the tell I had identified the part of the wall measured by Petrie at 28 feet, but this had long since been covered by our own débris thrown down from higher levels. Being on the look-out for it again, I was at first puzzled to know where it was to come in, as this room was so near the edge, when one day it flashed upon me that this chamber might be *in the middle* of that wall, which it turned out to be. So instead of a wall 28 feet thick we have a

great corner tower 56 by 28 feet, with rooms about 10 feet square, enclosed by a wall 9 or 10 feet thick.

The corner (D) rested on the native soil. Between D and C the ground rises 8 feet, but the original builders had dug a trench, in which the wall was built so that C was at the same level with D. In the unfulfilled hope of a foundation deposit we undermined both corners. Under the foundation of C we were puzzled to find a foot of black rubbish, but it can be accounted for by supposing that the original trench had been left open before the wall had been built, and that the rubbish had either fallen in or had been thrown in.

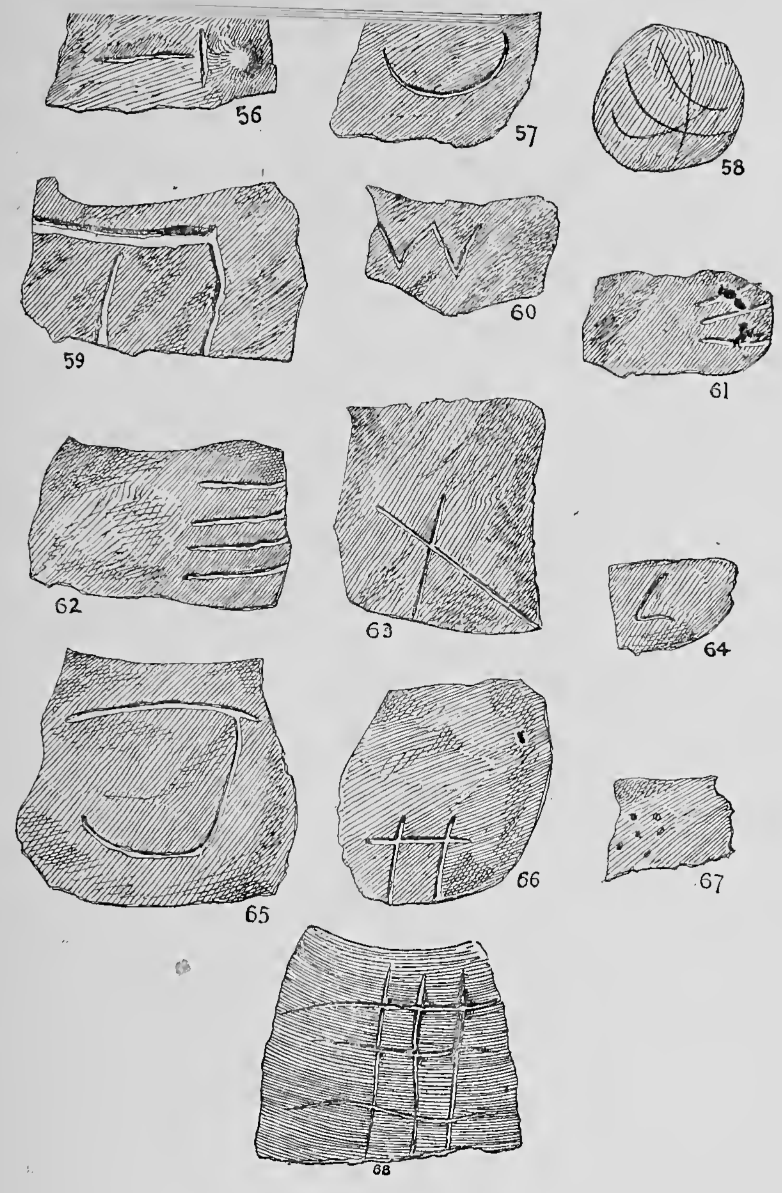
Outside of C—D were a few rough rooms with pottery of the same period. Outside of A—B was a thick wall, from the pottery evidently belonging to a later period, built on the ground which had been left untouched in this earlier period. This was probably the wall which Petrie found in his cutting when he searched for a western continuation of C—D. The lowest 2 feet of A—B near the corner B were built somewhat slanting, so that each course of brick was thicker than the one above it, as in a pyramid-face.

To the east of the *zigzag* line there were ruins of the houses of two cities (Sub I. and I.) one above the other, contemporaneous with the successive periods of the great tower, but they were so incomplete that

I decided that nothing could be gained by measuring and planning them, especially as the winter storms were upon us. The plotting of rude dwellings was undertaken with two purposes, to exhibit the unbroken layers, and to deduce the cubit. That the tell lay in unbroken strata, the plans of the upper cities are sufficient to show, and it is unsafe to attempt to deduce a cubit except from fairly unbroken lines of walls, as for example in City IV. The lower of these two sets of rooms rested on the native soil, and we examined them all to the level of the original floorings, with the exception of two or three which bore undoubted marks of having been pillaged in early times. The exact similarity of the styles of building and types of pottery in the two cities, contrasting with the change to the city above, showed that they were not far apart in date.

To the west of the zigzag line the space had evidently not been built over during the first two periods, neither did it seem to have been used as a rubbish-heap at that time, for the Amorite ware was absent, and in its place were the potsherds belonging to the stratum above. The original bluff was full of irregularities, with a general slope to the south, so that the ground near the point marked 'Well' was some 20 feet higher than the point D.

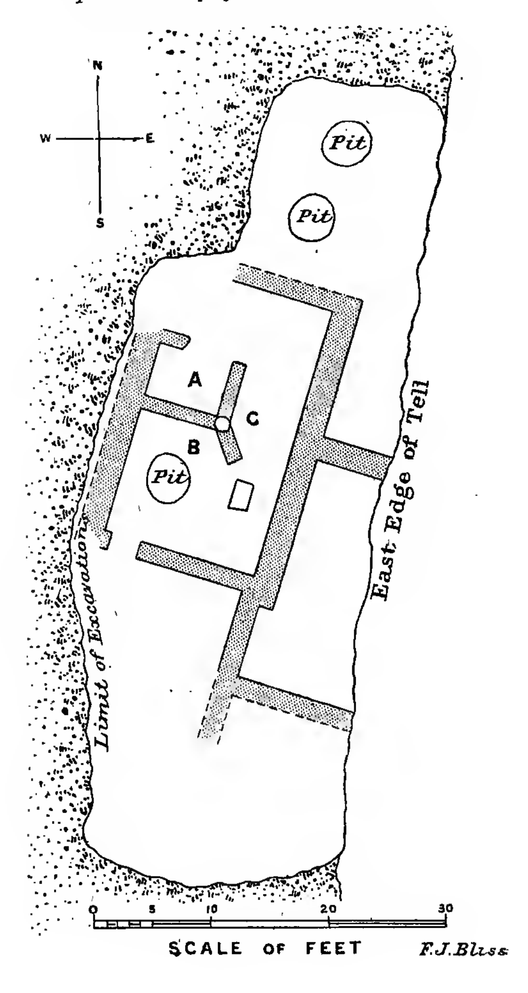
The absence of objects in these lowest cities was a great disappointment. A year before we had




MARKS ON FRAGMENTS OF POTTERY.

PLAN OF EXCAVATIONS AT SOUTH-EAST QUARTER OF TELL EL HESY.

*Depth below top of mound about 55 feet.*



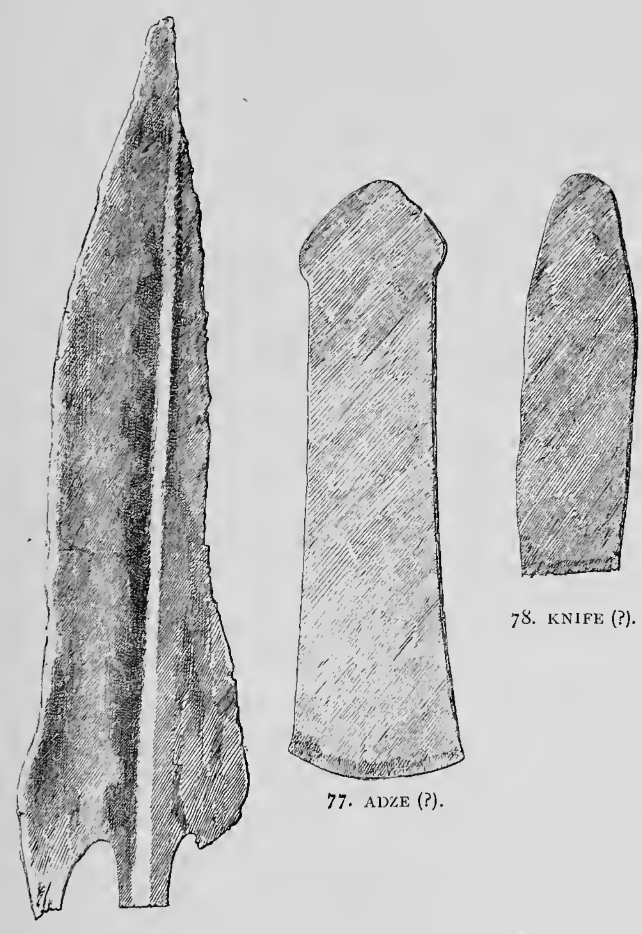


69. BATTLE-AXE (?).



70 71

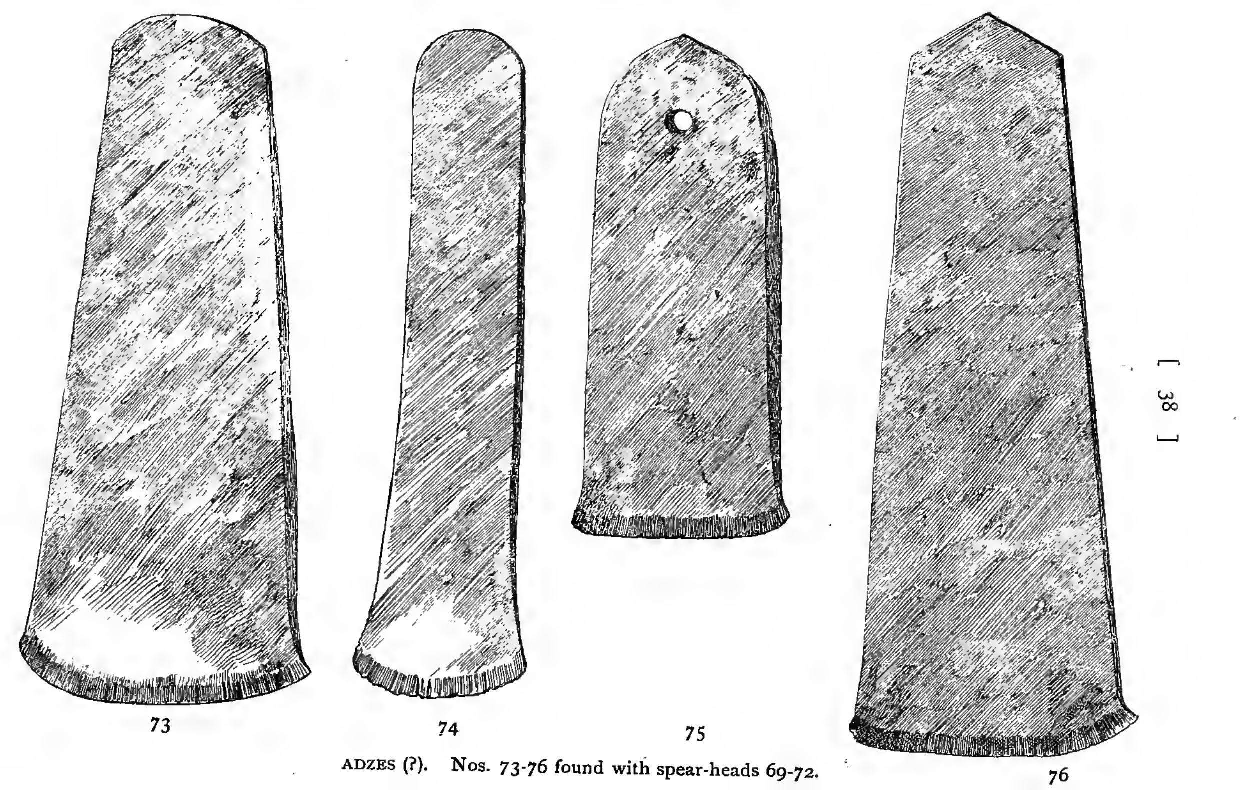
SPEAR-HEADS (BRONZE).



72. SPEAR-HEAD.

77. ADZE (?).

78. KNIFE (?).




ADZES (?). Nos. 73-76 found with spear-heads 69-72.

reached the same level in a small excavation, 50 by 20 feet, at the south-west part of the tell (at the point marked *p* on Plate II.), and had chanced upon a house, burned and filled with ashes. The small circle indicates a hole in the ground, 15 inches in circumference, with a smooth, rounded stone at the bottom, opening into rooms A, B and C. In room A we found a group of copper articles (Figs. 69 to 78, reduced one-half). They are important as showing contemporaneous types. In general they are unlike weapons found in Egypt, and probably represent the local civilization. No. 69 resembles a battle-axe. As the edge is not sharp, it may have been a royal halberd, more for show than for use. Nos. 70, 71, and 72, are spear-heads. From the action of the heat, 70 had fastened to it a bit of a knife-blade, and an ornament in the shape of a dog; hence the murderous little projection may not originally have belonged to it, though a careful examination leaves this matter doubtful. Nos. 73, 74, 75, 76, and 77, are different forms of adzes. No. 75 is very heavy, being exactly 12 millimetres, or about half an inch thick. Near the top is a hole, and it comes to a fine edge at the end. No. 76 is 9 millimetres thick. No. 77 is very light. No. 78 is a very thin knife. The



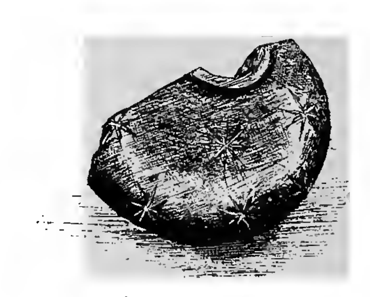
79. WOODEN SEAL.

wooden seal (Fig. 79) was found near by. This find illustrates the chances of digging. It was made in a small side excavation; while in our large clearance, on which we had based such great hopes, we found at this same level hardly anything.

Among the few objects that turned up were polished articles in bone, shaped like pointed paper-cutters, perhaps used in arranging a pattern in



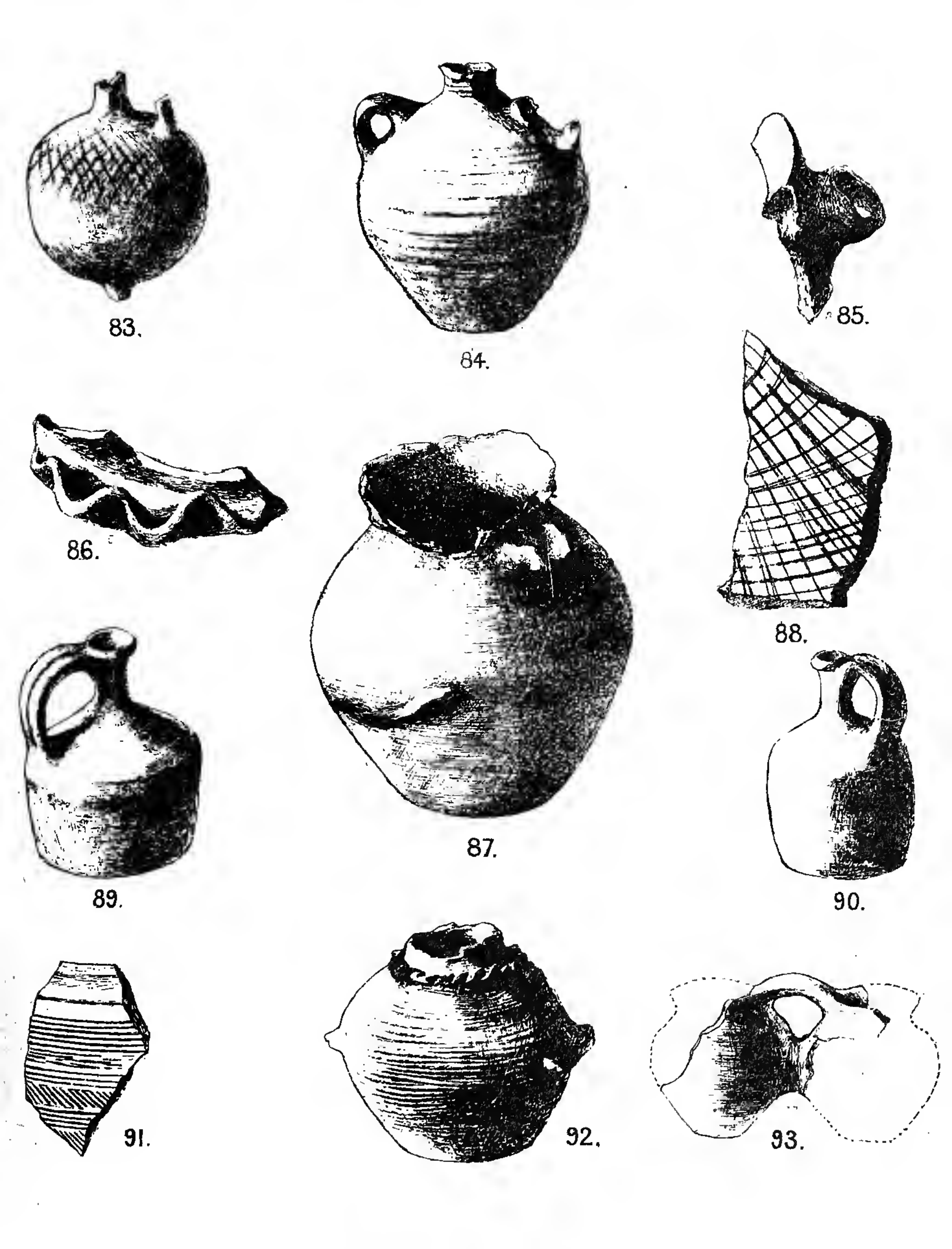
80. BRONZE FIGURE.



81. MACE-HEAD.

weaving. These were found again near the top of the tell (see cut 256), but not in the strata between. We also found No. 80, a bronze figure much decayed, suggesting the god Bes, plainly a charm, as it was to hang by a ring at the head of the figure. Nos. 81 and 82 are mace-heads.

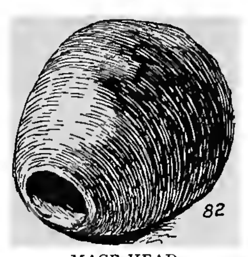
These earliest cities, represented by one plan, I call City Sub I., and City I. respectively. They contain but one class of pottery, which Professor Petrie calls



JARS VASES &c



Amorite. This name will do as well as any other, to distinguish it from the well-known types of Phœnician pottery which begin to appear in City II., running up through City IV. By Amorite pottery, then, we must understand the well-marked types of pre-Israelitish ware, the earliest use of which we cannot at present fix, but which went out as a prevailing type in the sixteenth century B.C., though specimens are found for centuries later. I wish to emphasize the sudden change in the pottery between City Sub I. and I., and City II. A great number of the specimens of the various Amorite types have been drawn by Petrie in his 'Tell el Hesy,' so that I shall confine myself to a single plate, illustrating the characteristics. Nos. 87 and 92 give the *ledge-handles* in place, while No. 83 is the perfected type of the same sort of handle, belonging to a much larger vessel, with almost straight sides.



MACE-HEAD.

*Combed-facing* is the term applied by Petrie to the markings of which No. 91 is an elaborate specimen; No. 92 is its simplest form, but as is it evident from the irregularity of the lines that they were made by a single point (before the clay was burnt), it is an open question, as Petrie implies, whether the regular markings on No. 91 were made with a

similar instrument, or with a comb of several teeth.

The fragment No. 88 shows the red-faced ware with the burnished marks upon it, called by Petrie *patterned burnishing;* and No. 83 shows the marks as they occur on a jar. No. 85 shows the *peculiar spout* of this period, projecting out from under a brim thickening in the inside, belonging to the *thick-brimmed bowls* he describes. It is fortunate that these five peculiarities should so distinguish this pottery from the Phœnician on the one hand, and the Egyptian on the other, that when, hereafter, in Palestine, we find a level characterized by them, we may feel confident that we are working in the remains of the ancient local civilization.

No. 89, found by me in City II., is a development of the more archaic form (No. 90) found by Petrie in City I.

Here he also came across No. 93, 'a curious vessel, formed by two vases joined side by side, with a handle across the top. A small hole joins the two together inside, so that no different liquids could be kept in them.'

Nos. 1 to 68, are marks on potsherds found exclusively, with the exception of No. 21, in these earliest strata. Some of them look like an attempt at writing, while others are clearly only potters' marks. We may leave this question open till other

sites have furnished us with further specimens. They were incised before baking; generally on stone-ware, with a smudged, black-brown surface.

I leave the question of chronology to be discussed in a later chapter, merely remarking here that City I. may be dated about 1600 B.C., and City Sub I. of course earlier.

## CHAPTER III.

### THE SECOND AND THIRD CITIES.

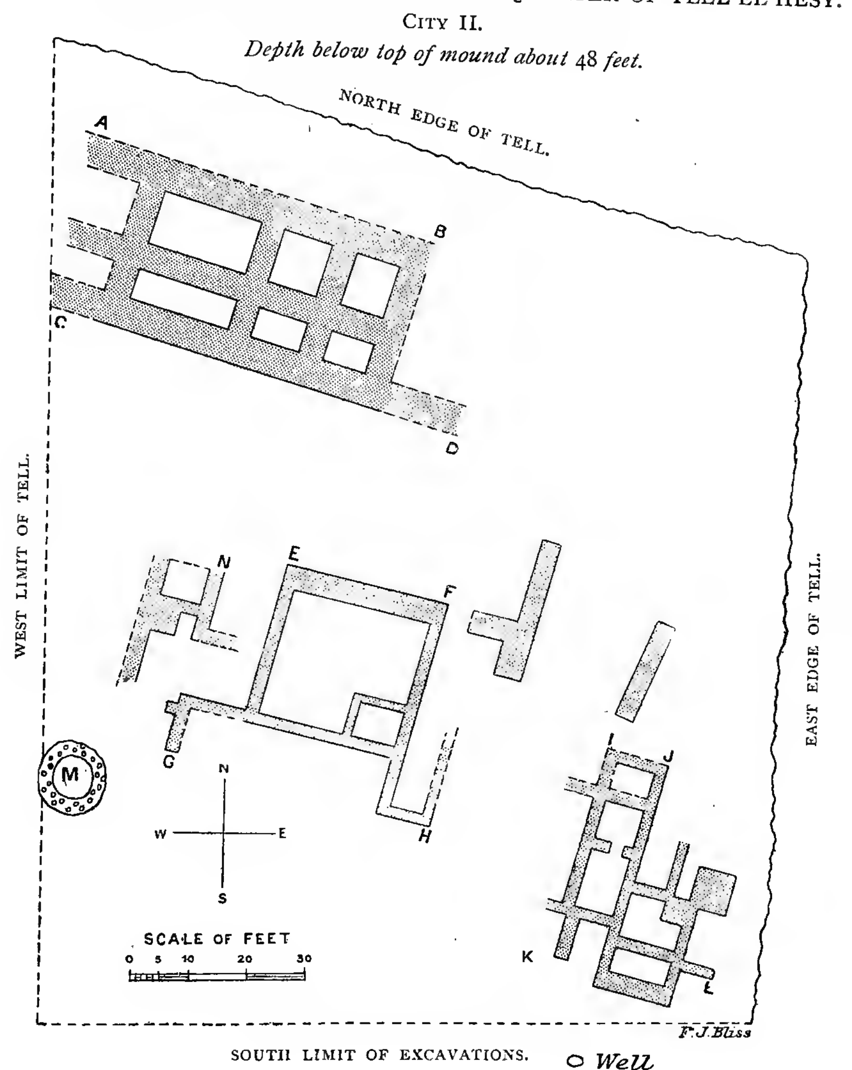
ABOUT 17 feet above the base of City Sub I., we find the foundations of City II., 48 feet below the top of the mound. The rooms I, J, K, L appeared to belong to an earlier period than the rooms A, B, C, D, showing a decided difference in material, being built of a dark-brown clay with little straw, similar to a long wall under A—B, 53 feet under the top of the mound, which I have not figured, and also to a set of rooms on the corresponding level at the south-west of the mound, just above the burned rooms where we found the bronzes. Rooms A, B, C, D were built of reddish-yellow clay, full of straw, the prevailing material of the tell. I, J, K, L then, we may assign to City Sub II., and A, B, C, D; E, F, G, H, O, N, to City II.

It will be noticed that the rooms of City II. show no doors. This is because they had been ruined down below the level of the door-sills; in other words,

# PLAN OF EXCAVATIONS AT NORTH-EAST QUARTER OF TELL EL HESY.

CITY II.

*Depth below top of mound about 48 feet.*



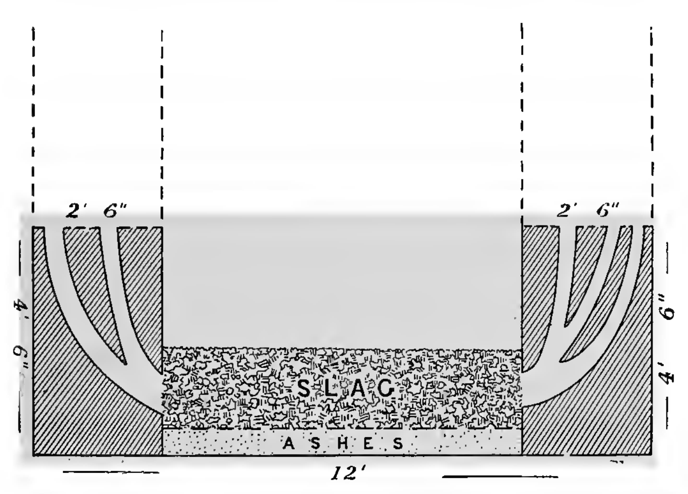

SOUTH LIMIT OF EXCAVATIONS. ○ Well

we have the mere foundations or ground-plan. A, B, C, D may once have continued further east, but all the rooms at the north-east quarter were too much over-thrown to reveal the original design. E, F, G, H, O, N were thin walls of rude stones built in mud. This was the nearest correspondence I found with the stratum of stones seen by Dr. Petrie at the east edge below the ashes.* But as E, F, G, H, O, N are contemporaneous with the best brick buildings, I cannot infer a comparatively rude period. Under the wall O, N there was a drain.

On the plan of City II. may be seen the circular place M; as this part of the tell had been very little occupied before the period of the ashes, it is difficult to tell whether M belongs to City II. or City III. One thing is clear: it antedates the ashes which extend over it. As seen in cut 94, it was a roughly circular structure with a diameter from outer wall to outer wall of about 12 feet; the walls were about 2 feet thick, leaving the chamber a diameter of 7 feet. The walls were of mud, with some rough stones inserted, and remained standing to a height of 4 feet. As all through the tell (with the exception of the great Amorite tower) we never found more than one-fourth of the probable original height of walls left standing, we may infer that it was much higher, perhaps 12 or 15 feet. On the top of these walls

* See close of Chapter I.

appeared holes, descending in the walls to an apparent depth varying from 1 to 3 feet. One hole was bell-shaped. Some were in the centre of the walls, others near the inner and outer edges; their diameter at the top varied from 2 to 4 inches. From the outer solid face of the walls it was clear that




94. SECTION OF FURNACE.
1400-1500 B.C.

they had no outlet to the outside. The holes were lined with a grayish-green deposit, and under this the brick was burned red for an inch below the surface. The floor of the chamber was of mud brick. On this was a bed of ashes, and on the ashes a lot of broken stuff—burnt brick on one side and a coloured glaze on the other.

This accumulation of ashes and stuff was 2 feet deep. The rest of the chamber was filled with fallen earth. About 1 foot from the floor of the chamber there were openings into the walls. On examining the walls we found that these openings were outlets of the afore-mentioned passages. We followed three such passages, and found that each passage ramified into two or three branches which led upwards. When we first observed these holes from the top, my foreman, Yusif, declared that we were to expect this intricate mechanism of connecting passages. I was very sceptical, for his theory would involve the idea that the builders had arranged these complicated passages during the course of construction, involving an accuracy hardly to be expected at this period, but the examination of the building proved his theory correct. As I have said, we actually followed the passages from the inner chamber up through the walls to the outlets above. On the south side there seemed to have been an opening into the inner chamber from without, but so much ruined that I could only guess that it was 2 or 3 feet wide and a foot or two high. Directly outside and on a lower level were signs of a pit.

In my first notice of this structure I reported that a qualitative analysis of the glazed stuff at the back of the broken brick indicated the presence of iron. I showed that the structure presented the usual

features of a simple blast-furnace with one important addition. 'We have the chamber, probably once 15 feet high, which may have had a conical shape above the point to which the walls were ruined. We have the slag which had hardened upon the side of the furnace, broken off and taking with it bits of the mud-brick wall, baked hard. We have an opening to the outside, and a pit for collecting the metal. We would naturally suppose that the blast of air was forced through this opening had we not to account for the passages leading from the lower part of the chamber up through the walls. These were of course intended either to conduct upwards what was in the furnace, or to bring something down into the furnace. The first case would be covered by supposing that the flames and hot air were meant to fly up the passages to keep the walls heated and to react on the chamber, but a fire hot enough to influence the walls by the hot air passing through these holes would be hot enough to heat the chamber without any such heating of the walls. The other case would be covered by supposing that these passages opened at the top of the building into some covered place, a chimney being left in its centre for the escape of gases from the chamber below, with a single opening through which a blast of air could be forced from outside down through the passages, become heated as it descended, and enter the

chamber at the level where tuyères are usually found, as a stream of hot air. At first the greenish deposit on the walls of these holes might seem to be an objection; but it is quite reasonable to suppose that the man working the bellows above might sometimes stop to rest, when the flames and gases would rush up, resulting in this baking and coating of the lining. This constant inrush of cold air from above, inside the walls, might help to explain why their interior was not baked hard, except at their face inside the chamber. If this theory be correct, we find 1,400 years before Christ the use of the hot-air blast instead of cold air, which is called a modern improvement in iron manufacture due to Neilson, and patented in the year 1828.'

The assumption was, that we had found an early blast-furnace, probably for iron. I recognised a difficulty, however, in the fact that 'whereas I had found iron implements in plenty down to the level which we assigned to a date not earlier than the tenth century B.C., not far from the earliest known dates for iron tools in Egypt, from that level downwards to the level under consideration, which is no later than the fifteenth century, no iron tools turned up, having given place to bronze.' However, when I came to England, Professor Gladstone kindly made a quantitive analysis of the 'slag' (see Appendix B), which showed that the proportion of iron was altogether

too small for iron slag. In his opinion, the stuff was simply fused brick, broken off from the furnace walls, and not, as I had assumed, brick with metal slag attached to it. In other words, it gives no indication of the nature and use of the furnace.

Accordingly, we must wait until further light is thrown upon this interesting structure by future excavations. It may be an oven for baking pottery, though it is quite unlike the modern pottery works of Syria, and the complicated passages induce one to believe that it was used for some more difficult process. Whatever may have been its use, these holes were evidently constructed for the introduction of a hot blast.

On plan of City III. are represented the remains of the stratum 5 feet above City II. We have a series of rooms against the north wall, the outer face of which was worn away, but which was at least 17 feet thick. As in the lower city, I assume that the building was carried on further to the east. The walls were preserved only 2 or 3 feet above the door-sills, which were 9 feet wide. The wall between rooms E and F was so much ruined that we could not detect the doorway that doubtless once existed. In these well-preserved rooms we found hardly anything but fallen brick, even the inevitable potsherds being very scarce. To the south of the rooms was a mass of débris, more or less consolidated. To the

east of the outer doorway of room (1) there was a fallen mass of broken brick, burned stuff, and rubbish. Out of this my men had rescued some lance-points and fragments of pottery. Just before noon on May 14, 1892, after I had gone to my tent for lunch, my foreman Yusif on his rounds approached a lad who was bending over this rubbish-heap, and when he came up he found the lad brushing off the earth from the face of a tablet and regarding it with the curiosity which anything new always awakens in these Fellahîn.

When Yusif brought the tablet to my tent, the incisions were still filled with earth, and it was not till I carefully brushed it clean that the precious cuneiform letters were apparent.

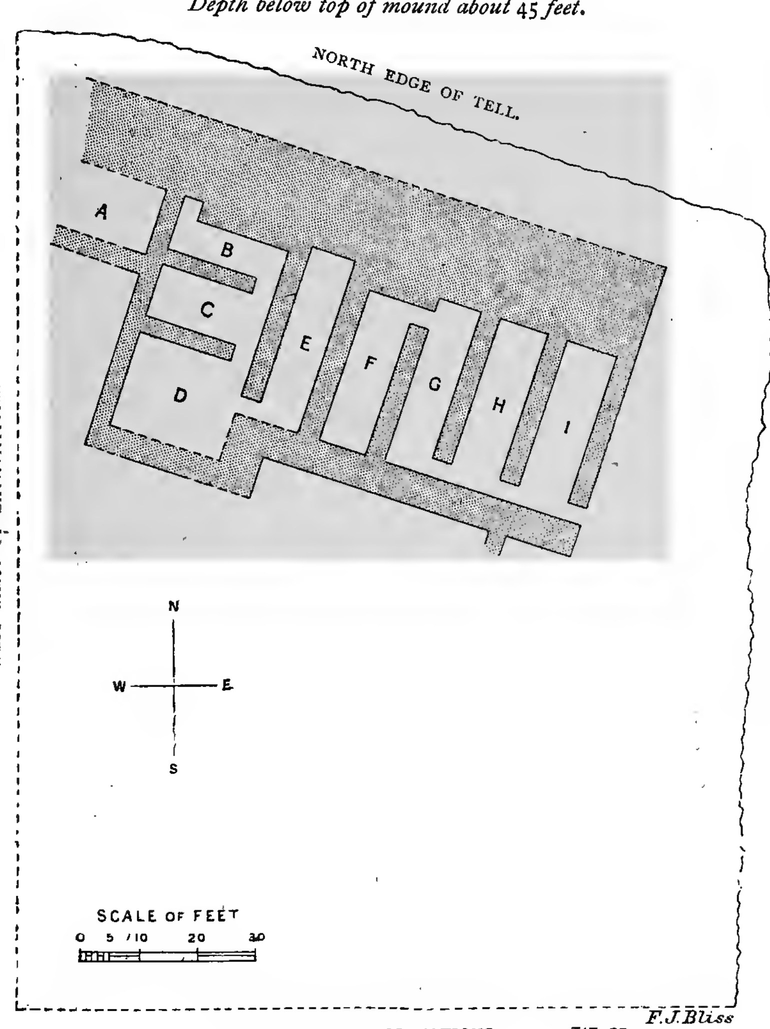
Then I thought of a day more than a year before when I sat in Petrie's tent at the Pyramid of Meydûm with Professor Sayce. He told me that I was to find cuneiform tablets in the Tell el Hesy, which as yet I had never seen, and, gazing across the green valley of the slow brown Nile, and across the yellow desert beyond, he seemed to pierce to the core with the eye of faith the far-away Amorite mound. As for me, I saw no tablets, but I seemed to be seeing one who saw them!

For many years Professor Sayce had believed that pre-Israelitish Canaan possessed its libraries of clay tablets like Assyria and Babylon. The discovery in

PLAN OF EXCAVATIONS AT NORTH-EAST QUARTER OF TELL EL HESY.

CITY III.

*Depth below top of mound about 45 feet.*




SOUTH LIMIT OF EXCAVATIONS. ○ Well

1887 by a peasant woman of 320 clay tablets at Tell el Amarna confirmed his belief. For these tablets found in the ruins of the palace of Amenhotep IV., known as Khuenaten, consisted of letters addressed to him and to his father, Amenhotep III., or to their officers, not only by Kings of Babylon, Assyria, and other regions, but by their own governors in cities subject to them in Syria. It was hoped that the other end of the correspondence might be found buried in the Syrian tells.

Of his feelings when he heard of my discovery I will let Professor Sayce speak for himself:

'I awaited the arrival of the casts and squeezes with almost breathless impatience. The fact that several cuneiform inscriptions on slabs of stone have been forged of late years in Palestine made me fear that a disappointment was in store for me. When Mr. Armstrong brought the impressions to Oxford and we had unpacked them together, my relief was great. The cuneiform inscription was not only genuine, the tablet on which it was inscribed was just one of those which I had long believed were lying buried under Palestinian soil.

'In size and shape it resembles the tablets sent from the south of Canaan which have been discovered at Tell el Amarna. The forms of the cuneiform characters, moreover, which appear on it, are those which we now know to have been used in Southern

Canaan about B.C. 1400. Lastly, the formulæ and grammatical forms are identical with those employed by the scribes of Southern Canaan when writing to the Egyptian kings. We find them in the tablets of Tell el Amarna as well as in the tablet of Lachish.

'The fact that the original was not accessible made the copying of the cuneiform text somewhat difficult. Indeed, it is sometimes impossible to tell from the impressions what exactly are the characters at the edges of the tablet, or where the surface of the tablet is worn. Hence the lacunæ and indications of uncertainty which exist in my copy of the inscription. A translation of the text has been further rendered difficult by the existence in it of words which have not been met with before, and which are, therefore, of doubtful meaning. Fortunately, enough is clear to show us what the letter—for such it is—is about, and to what period it belongs.

'What makes this letter so particularly interesting is that we already know something about Zimrida, who is twice mentioned in it. Zimrida, or Zimridi, as he is also called, was Governor of Lachish in the reign of Khu-n-Aten, and a letter from the King of Jerusalem to the Egyptian Pharaoh informs us that he was murdered at Lachish by servants of the (Egyptian) king. One of the despatches discovered at Tell el Amarna was sent by

him to Egypt, and runs thus: "To the King, my Lord, my God, my Sun-God, the Sun-God who is from heaven thus (writes) *Z*imridi, the Governor of the city of Lachish, thy servant the dust of thy feet, at the feet of the King, my Lord, the Sun-God from Heaven, bows himself seven times seven. I have very diligently listened to the words of the messenger of the King, my Lord, has sent to me, and now I have despatched (a mission) according to his message."' There seems to be no reason for identifying *Z*imridi of Lachish with *Z*imridi of Sidon, mentioned in the Tell el Amarna correspondence.

I give in Appendix A the transliteration and translation of Professor Sayce. The tablet is now in the Imperial Museum at Constantinople, and I hope that an examination of the original may remove some of the uncertainty inevitably arising from the study of a cast. It seems clear, however, that we have here something archæologically far more important than a letter from Egypt—namely, a local letter sent from one Syrian city to another. The discovery of such a correspondence, which we may now expect in future digging, would be simply invaluable. Is it too much to say with Professor Sayce, that 'the buried records of the past are about to speak once more and tell us, it may be, of days when Abram, the Hebrew, pitched his tent in

the neighbourhood of Hebron and paid tithes to the King of Jerusalem'?

We may at least hope that, when we next examine a site belonging to this period, it will contain, if not an untouched archive chamber, at least the eighteenth dynasty equivalent to a modern waste-paper basket.

Major Conder's translation of the tablet may be found on p. 133 of his 'Tell Amarna Tablets.' In his opinion the letter was addressed to *Z*imridi.

When I took in my hands the Tell el Amarna tablets preserved in the Ghizeh Museum at Cairo, I was startled with the resemblance to mine, not only in their general appearance and in form of their letters, but in the material as well. Misled at first by the hardness of my tablet, and by the fact that taking casts and squeezes (against which I had been warned) did not injure it at all, I had called it a fine sandstone, but an examination of the Tell el Amarna tablets showed me my mistake. The tablet is of burnt clay, of a dark brown or coffee colour; in size about 2½ inches by 2.

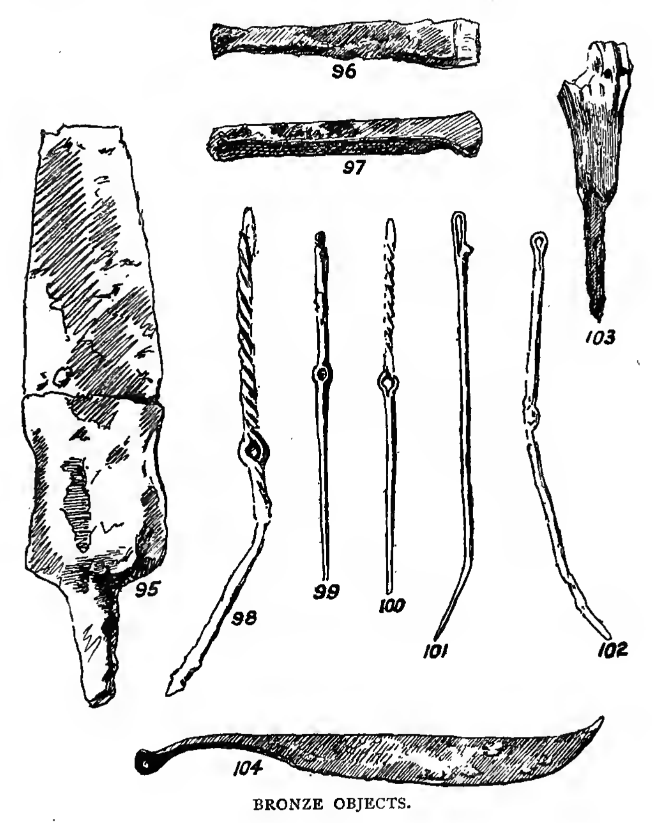
The internal evidence shows that the tablet belongs to the fifteenth century B.C. We may now look at the external evidence. Found in the stratum overlaid by the thick bed of ashes, it is most improbable that it belongs to any period above that bed. The objects associated with the tablet in City III. show nothing later than the eighteenth

dynasty, while scarabs of the middle of this dynasty occur. City II., immediately below this level, and evidently not much earlier, is characterized by the earliest appearance in the tell of Phœnician pottery, which in Egypt has not been found in any sites earlier than Tell el Amarna, whose ruins belong to the fifteenth century B.C. The correspondence, then, between the internal and external evidence is good.

The question naturally arises, Why should one tablet have been found, and no more? This may be answered by a glance at the condition of the tell at this stratum. We noticed that in City III. we have a series of rooms, quite empty, and outside them a mass of débris containing very few objects, one of which was the tablet. The inference is plain. The enemy who captured this town utterly sacked it; some houses they destroyed altogether, others they razed almost to the ground, having previously robbed them of all their valuables. In the débris the tablet was thrown either by accident, or else was neglected as something quite unimportant. Other letters, supposed to be of value, may have been carried off. Having a melancholy experience of the 'barrenness of the land,' archæologically speaking, at this period, my wonder is that *one* tablet should have turned up, not that *only one* was preserved.

However, the same chance that preserved this one may be concealing a few scattered tablets in the

two-thirds of the tell still untouched. But that the pillaged condition of the one-third of this city which I have thoroughly examined should forbid




BRONZE OBJECTS.

us to expect anything like an undisturbed 'archive chamber' in the remaining two-thirds is strongly my opinion.

Again, it may be noticed that the tablet was found not far from the east edge, which has been worn away, perhaps to the extent of 25 feet. Who can say but that other tablets have been carried away by the undermining of the stream?

In Cities II. and III. occurred the objects in bronze, Nos. 95 to 104, reduced one half. No. 95 is a large spear; note the rivet for fastening on the handle. Nos. 96 and 97 are chisels; No. 103 is a borer, fastened in a bone handle; Nos. 98 to 100 seem to me to be ornamental hair-pins; Nos. 101 and 102 are needles, the eye-holes made by bending over the wire; the round holes occur in Egypt, but the long holes I believe have not been found there. No. 104 is a very thin knife; the curve at the top of the blade is common in Syrian knives to-day.

In these cities occurred the three scarabs, Nos. 115, 116, 117, which will be described in Chapter VI. In City II. were weavers' weights of sun-burnt brick, punctured with holes by which they could be fastened to the wooden pegs on which the skeins were wound. These occurred again near the top of the mound, but not in the intermediate levels.

In City III. was the pottery slab No. 105, with female figure in low relief, wearing the head-dress of Hathor. Otherwise the figure resembles the shape found in City IV., No. 111.

I have called attention to the decided change in the pottery between Cities I. and II. Specimens, indeed, of the Amorite ware occurred in City II. as well as specimens of the Phœnician ware common in higher levels, as, for example, a group containing a pointed-bottom juglet and a bowl; but the larger number of potsherds had no especial characteristics, doubtless the sort of sherds had in mind by those who declare that in rough, unpainted pottery there can be no key to chronology! The pottery of City III. was, in general, similar. The period was one of transition from the Amorite to the Phœnician ware which came in as a prevailing type after the period of the ashes.*

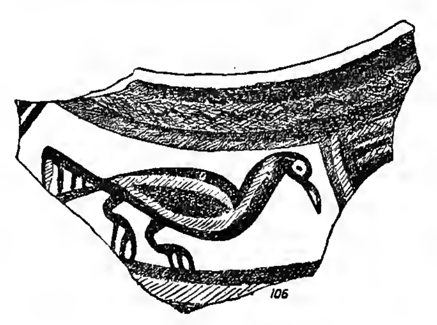


POTTERY SLAB.

I must call attention to Nos. 106 to 109, found in City II., which are so different from the ordinary

* In explanation of my unhesitating affirmation of a change of pottery between any two levels, it must be remembered that in clearing out the rooms, and in examining the other remains of any one stratum containing 50,000 cubic feet of stuff, hundreds of potsherds were turned up daily for a fortnight, that all of these passed under my eye, and most of them through my fingers.

types of pottery in the tell as to suggest foreign importation. They are of a hard, firm paste, unlike the rough painted ware illustrated in Chapter IV., and resembling the finest Egyptian ware of the Tell el Amarna period, having very fine white grains in the paste not found in the Ægean ware, which it otherwise resembles. The figures, however, are roughly painted, and have not the Ægean iron-glaze, the pigments being earth, and not oxide of




FRAGMENT OF POTTERY.

iron, and the surface has not the polish produced by firing, as in the Ægean ware. The fragment with the bird, No. 106, belonged to a large wide-mouthed vase, painted in red and black on a surface covered with a browny-white wash. It was found just outside the walls C D in City II.; a comparison of Cities II. and III. will show that it was overlaid by the southern end of the large house in City III., hence it was probably *in situ*. Professor

Petrie found Ægean pottery of the fifteenth century at Tell el Amarna. This is the century to which the tablet and other considerations to be discussed later lead us to ascribe Cities II. and III.




FRAGMENTS OF POTTERY.

## CHAPTER IV.

### FOURTH CITY—THE BED OF ASHES.

REFERENCE has often been made to the bed of ashes, which may be seen on Plate II., about midway in the tell. I came upon it between Cities III. and IV. Of this ash-bed Professor Petrie says: 'These ashes were certainly spread by the wind. Alternate layers of black charcoal-dust and white lime-ash streak the face of the mound for a depth of about 5 feet, and the lines are always unbroken and continuous, often a streak not over half an inch thick being traceable for 10 or 20 feet, and gradually thinning out at the ends. No deposit by hands could effect this; the stuff must have been wind-borne, and dropped by the breeze without interference.'

This ash-bed I found all over the area of my great excavation, the thickness varying from 3 to 7 feet in the middle of the excavation; it covered the rooms of City III., but at the city wall, 17 feet thick, against which these rooms were built, it came to an end, curling up against ruined brickwork, from which we may infer that the rooms had been

worn down further than the city wall, which, though much broken, served as a barrier against the wind-borne ashes. When the place was re-inhabited the old city walls were used as a foundation.

As a rule, the bed of ashes formed a distinct stratum between the débris of the buildings below and above, but we found the ashes varied here and there by a few rude constructions of stone and poor brick, much ruined. Bones and broken pottery occurred not only in these ruins, but also among the ashes.

This great bed of ashes remains the mystery of the tell. Petrie ascribes them to alkali-burners who plied their trade on the deserted hill. I am inclined towards a different view, based on the furnace found just below. The ruins found among the ashes may indicate other similar furnaces which at this period may have monopolized the place. Whatever may have been their use, such furnaces doubtless gave rise to great heaps of ashes, which began to be distributed by the winds over the tell before the furnaces were destroyed (as shown by the pottery scattered through them); this distribution was continued after the furnaces fell in ruins, the ashes lying in the open places in regular stratification, and otherwise mingling with the ruined buildings.

Whatever may have been the cause of the ashes, their stratum does not indicate a long desolation, for not only does the pottery above and below them

show the same types, but the two groups of scarabs found respectively in Cities III. and IV., between which the ashes lie, are of the eighteenth dynasty.

The space occupied by these few paragraphs describing this bed of ashes hardly suggests the long and tedious time occupied in its removal. Often the question, 'Is it worth while?' tormented me, when, at the end of a week's work devoid of finds, I paid off almost a hundred work-people. But without the entire clearing away of the bed the chances of finding the tablet would have been almost *nil*. Supposing that we had known that this tablet—not three inches square—existed at some point under the stratum, which contained 50,000 cubic feet, a hundred pits and trenches might have missed it. Unhappily, we now know that the lowest Amorite town at this north-east quarter had been pillaged in earliest times, but not even this negative result could have been reached had we not quite uncovered it.

Immediately above the ashes the remains were in a greatly ruined condition. The next building which I have drawn is given on plan of City IV. (depth 32 feet), but under it there were the walls of houses (depth 37 feet), not well preserved enough to make a good plan, but quite plainly indicating a distinct period which I shall call City Sub IV.

City Sub IV., then, was built upon the ash-bed. In some cases trenches for the foundations of the

walls were dug into the ashes. The walls of this period show a rebuilding, but the remains were not sufficient for us to infer two distinct occupations. This city was defended by the usual north walls. Contrary to the ordinary rule, the remains of other

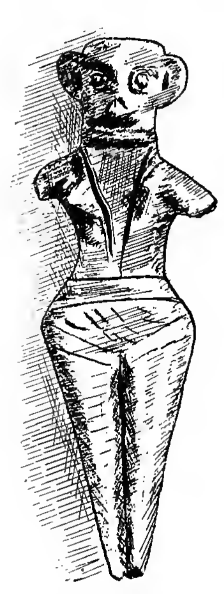


110. BRONZE IDOL WITH GOLD COLLAR AND BRONZE GOAT WITH KIDS. (*Reduced about one-half.*)

buildings were chiefly found in the western part of our excavation, which in other periods was an open space where refuse collected.

In one of the rooms I dug out with my own hands the bronze figure, about 4 inches high, seen in

cut 110. A bit of thin gold-plate clinging to the neck suggests that it might have been gold-plated all over, though this may have been only a gold collar. The bronze was much corroded, so that the features were indistinct, but the general shape suggests Ptah. The little stand on which his feet rest suggests Egyptian influence. Near by was found the tiny bronze statuette of a she-goat with two kids sucking. The goat stands on a bar supported by four little knobs. Of the same period is the female figure in pottery shown in cut 111. It is a well-known Phœnician type. We first found a headless figure, made very flat, with sharply-pointed breasts, small waist, and prominent hips. A duplicate turned up not long after, also headless. I put them aside, and happened to lay with them a small rough head in pottery, found later, which had a flattened head, probably representing a head-dress, though not distinguished at the back from the neck, so rude was the art. Its hook-nose suggested the beak of a bird. The ears were huge. One day by pure chance I placed



111. FEMALE FIGURE IN POTTERY.
(*Reduced one-half.*)

this head upon the shoulders of the decapitated figure, and it fitted exactly along the line of fracture. Moreover, the markings made by some instrument in modelling the clay corresponded exactly; certain lines could be traced from the head to the back. This shows the value of keeping fragments from day to day, as a bit missing from a broken object may be found in quite another place. Perhaps we have here a specimen of the household gods which were so small that Rachel could hide them among the camel furniture and sit upon them.

NORTH.

112.
PLAN OF WINE-PRESS, 1200 B.C.

To City Sub IV. belongs the wine-press, a place for making *dibs* (grape-treacle), found just above the ashes, planned on cut 112. First appeared the vat A, with a diameter of 63 inches; its walls were of mud, and it had a floor of cement somewhat sloping to a hollowed stone placed in the cement. Later appeared the vat B, about 3 feet lower than A. Its walls were of bricks, beautifully preserved, and its

floor of cement sloping rapidly to an outlet to the west. I imagine there was a connection with the small pit C, about 3 feet lower, which was lined with rough stones, and in the side of which, towards B, was found a stone spout. The liquor, transferred from A to B, could run from B to C through a pipe, and be collected in some vessel at the bottom of C. The rough pavements, D and E, were connected with the press, and F was a rough way between them, a little lower. G and H were pits similar to C. The cement flooring of B was harder than that of A, being made of pebbles embedded in lime, and was so solid that we could not break off a small piece with a hammer. As it had a diameter of over 5 feet, and a thickness of 2 feet, it was a problem how to get it out of the way. We stood it up on edge, made a sloping trench 2 feet wide to the edge of the tell, gave it a push, and down it rolled 80 feet to the stream-bed, where it lies to-day. Hollows in the pavements (D and E) suggested places for the huge caldrons in which the juice should be boiled for the treacle, after the grapes had been trodden in A and filtered from B to C. I have to confess that we destroyed A before we suspected the existence of B, which was at a lower level. Otherwise I should have been able to secure a photograph of this admirably preserved wine and treacle press of the thirteenth century B.C. This suggests a principal difficulty of our work. Our task of carefully examining the

north-east quarter of the tell at all its levels involved the removal of more than 750,000 cubic feet of earth. In order to accomplish this within the limits of our permit, the work had to progress with a certain rapidity. On the one hand, there was the necessity for caution to destroy nothing until completely planned; on the other, the need of despatch. The plan of the winepress, however, is correct.

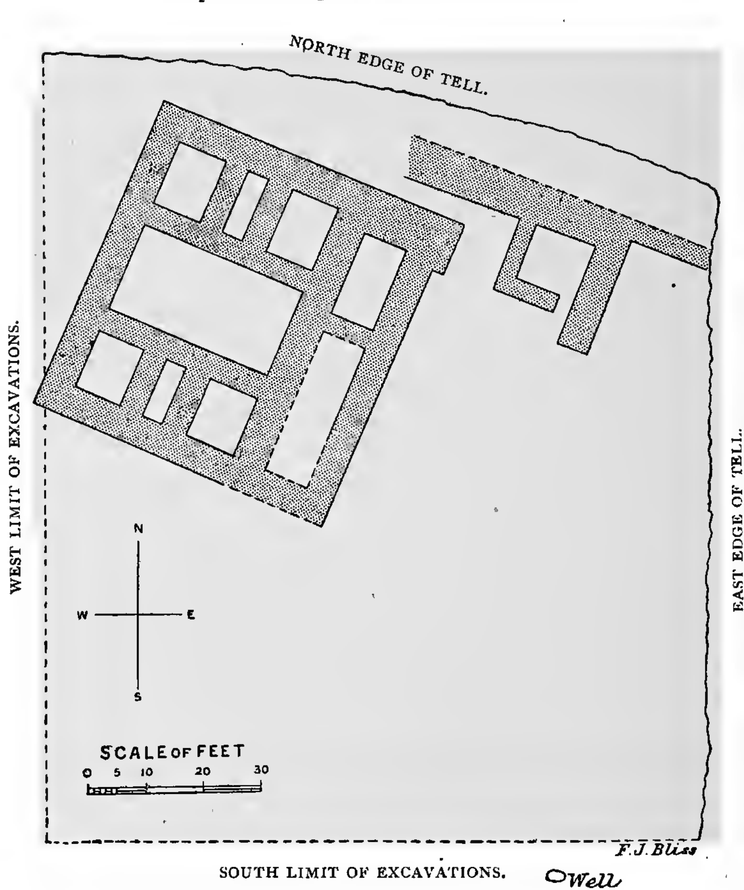
In another part of the excavation, at the same chronological level, we found a somewhat similar treacle-press, though ruder. Here the place for the kettle was upon two great stones placed parallel, with a stone at the back. Many *tannûrs*, or pit-ovens, occurred.

The base of City IV. occurred 5 feet above the base of City Sub IV., and 10 feet under the base of City V. The walls of the large building in City IV. were ruined down to a height never more than 3 feet; sometimes only a single course of brick remained, while in every case the walls left standing were below the level of the original door-sills, leaving us the mere foundations, which were singularly irregular in level. The first traces of this building were found in the southern rooms, which were easily cleared out, as they were filled with general débris. The walls were built in some cases on débris, in others on the walls of the lower city, but a bed of fine yellow sand, half an inch thick, always intervened. I always listen to the suggestions

# PLAN OF EXCAVATIONS AT NORTH-EAST QUARTER OF TELL EL HESY.

## CITY IV.

*Depth below top of mound about 32 feet.*



of workmen, believing that ancient local traditions of building may have been handed down to the present time. They declared that the yellow sand was to prevent the walls from settling. Without this clue of the yellow sand (which occurred only immediately under the walls, never extending into the rooms or outside the building) it would have been very difficult to trace the walls, though not impossible, for without it we have cleared other rooms which at first seemed one mass of indistinguishable brick, owing to the falling inward of the upper part of the walls.

The building (see cut 113), which is 56 feet square, is beautifully symmetrical, though we did not begin to guess this till the work of clearing had gone on for some time. Our method was strictly inductive. We did not presuppose symmetry and then infer connections here and there, but we followed the yellow-sand clue till the building stood out as planned. Our only inferences were in the rooms to the east, where it happens that the symmetry is broken. It was fascinating to find the outer wall at every part measure from 5 feet 4 inches to 5 feet 8 inches in thickness, usually 5 feet 6 inches. The variation was explained, for the walls visibly sagged, in some places inward, in others outward. How many centuries have they borne the weight of 30 feet of tell above them? The builders of this edifice found

the ground of very irregular surface, or of varying hardness, for the line of sand marking the foundations rises and falls in the same room in a zigzag line. From the symmetry of the rooms we must understand some public structure. The largest room was of considerable size, being about 30 feet by 15. The two small rooms were only 11 feet by 4, actually less broad than their encompassing walls. That we made no mistake in clearing them out is shown by their correspondence in position and size. It is difficult to imagine their use. From my measurements of the walls, exterior and interior, Dr. Petrie deduces that the cubit used was the foot of 13·3 inches found in Asia Minor.

To this period belongs the building of mud-brick found by Dr. Petrie at the south end of the east face, 5 feet above the bed of ashes. Its east wall was near the face of the tell, but in order to trace the other walls, on which 30 feet of accumulation were imposed, he was obliged to tunnel. He thus traced the south wall to its south-east corner, the beginning of the western wall and half the northern wall. The length of the building from north to south was 274 inches inside, and from east to west about 260. The inside of the building was strewn with ashes and charcoal, as from the burning of the roof. No small objects were found except four pottery vases, placed in pairs one on another.

113. LARGE BUILDING IN CITY IV., ABOUT 1300 B.C.

He found five doorways, and inferred a sixth; the number suggested a public building. The doorways all had limestone sills, laid in a bed of about 6 inches of clean yellow sand. (It is interesting that there was a bed of similar sand, though thinner, under the walls of the large building I found at this chronological level.) The measurements vary somewhat in the different doorways, showing that there was no exactitude in the building.

In some of the doorways Dr. Petrie found jambs 4 feet high of limestone, and also fragments of deep and thin stone lintels with a cavetto moulding. Two of the slabs forming the jambs were in place, each lining the side of a doorway next to the lock, the side which was exposed when the door stood open. Each slab bore a pilaster (114) in low relief, terminating in a volute in place of a capital. The slabs in place were evidently upside down, as the volute-capital was at the bottom; moreover, the jamb of the south-south-east door had a graffito of an animal scratched on it upside down, showing that it had been reversed since its first use.



114. PILASTER.

In his book Petrie gives a restoration of this stonework, according to his idea of its original position, before reused in this building. Below the pilaster-slab he introduces a plain dado, which not only is required to give the needful height to the doorway, but which also raises the lock-hole to a suitable height from the ground. In his building, where the slabs were reused, and where they stood on the ground, the lock-hole was brought to the right level by inverting the slab. This simple volute, terminating the pillar with no break below, suggests to Dr. Petrie a ram's horn nailed up against a wooden post. He sees in this the origin of the type of the 'horns of the altar,' so often mentioned in temple architecture. He assigned the 'pilaster building' to about 900 B.C., and the first use of these pilasters to about 1,000 B.C. The results of our more detailed work in the tell would put these dates back two or three centuries, but the type suggested by these pilasters might easily have come down to Solomonic times.

The discovery by Dr. Petrie of these slabs is another illustration of the chances of digging. The only ornamented stonework that turned up was found, not by me, who pierced to the heart of the tell, but by my friend, who hardly more than scratched its skin.

Above the 3 feet of walling belonging to my large building in City IV., there were 7 feet of accumu-

lation of decay; rough stones and brick-wallings, all under the base of City V., and all accordingly to be



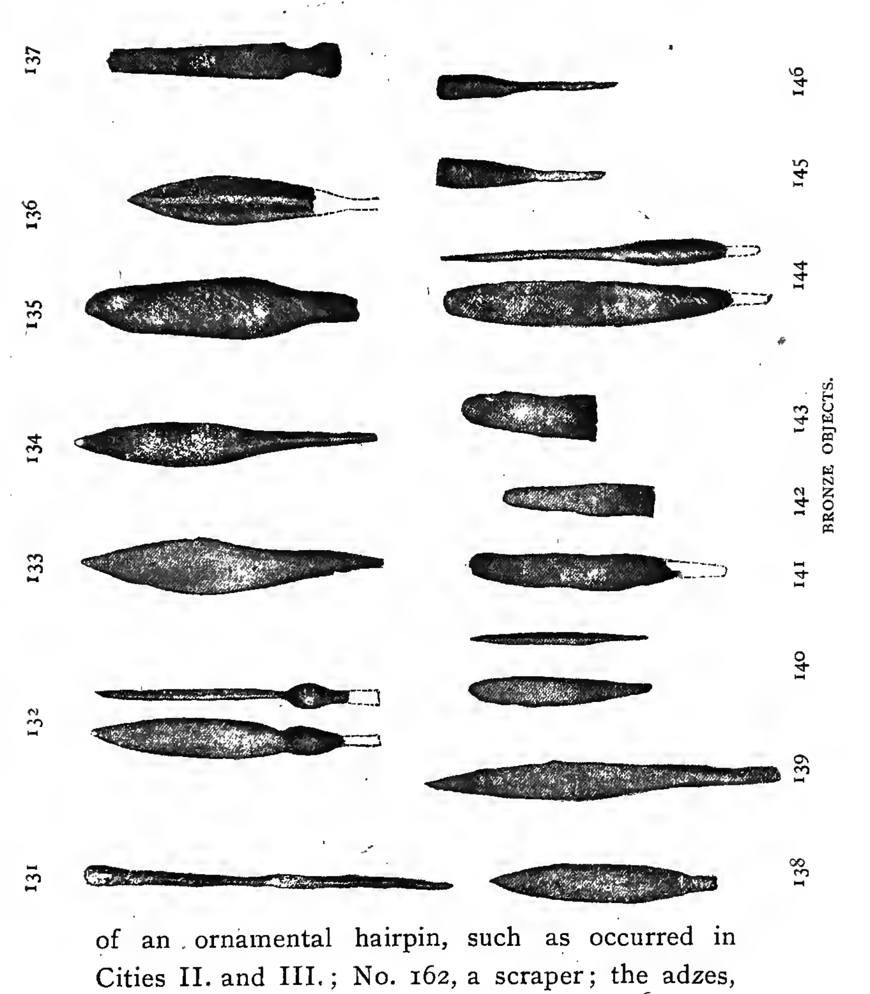

SCARABS AND CYLINDERS.

assigned to City IV. Such an amount of accumulation represents a long period. In Cities Sub IV.

and IV. were found the cylinders Nos. 126 to 130. Nos. 126, 127, are of paste with a blue glaze, and Nos. 129, 130, are of stone. No. 128 occurred near the top of City IV., and has the blue glaze of the twenty-second dynasty (Bubastite). As Nos. 126, 127 were found with beads of similar paste in the débris outside of the wall to the north of the large building in City IV., they may belong to a higher level, as near the edge we sometimes found a tilted stratum (an archæological 'fault') of objects thrown down from above. Nos. 129, 130 differ from the others, not only in material, but the figures, though very rude, have rather more spirit. We may assign them to City Sub IV., together with the scarabs Nos. 118 to 122, while scarabs Nos. 123 to 125 belong to City IV.

In these two cities were found various objects in bronze. No. 131 is a long packing-needle; Nos. 132, 133, 135, 136, 141, 144, 154, 155, 156, are all probably small spear-heads; Nos. 142, 143 are knives; Nos. 145, 146 are probably borers; Nos. 148, 161 are needles; No. 151 is of lead, it was probably a kohl-stick for painting the eyelids; No. 152 is a ring; No. 157 represents objects in slate, pierced with a hole, which we found in great numbers and at all levels, but they were commonest here, perhaps spindle-whorls; No. 158 is a charm of carnelian, representing the Eye of Horus, so common in Egypt;

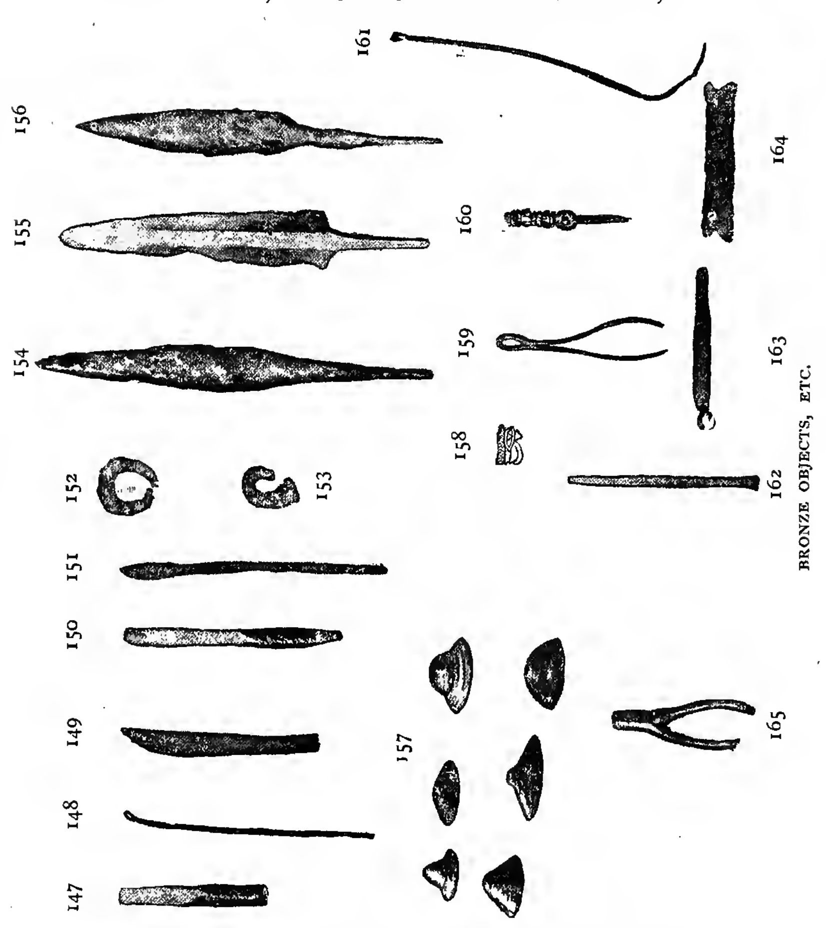
No. 159 is a pair of tweezers; No. 165 is similar, but thicker, more like pincers; No. 160 is the top




BRONZE OBJECTS.

of an ornamental hairpin, such as occurred in Cities II. and III.; No. 162, a scraper; the adzes,

Nos. 167, 169, are similar to the shapes found lower, while No. 168, five-twelfths of an inch thick, is a

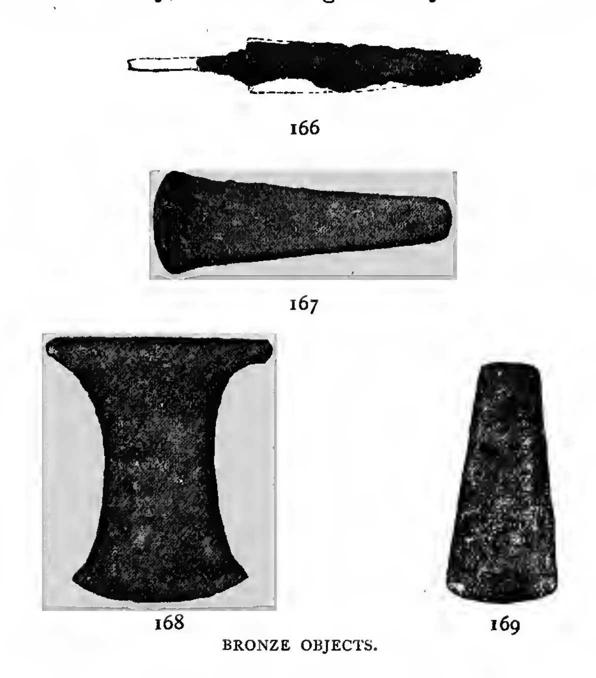



BRONZE OBJECTS, ETC.

common Egyptian type; No. 166 is a large spear-head.

In the reproduction (cut 170) of the photograph

of various objects in stone (dishes, pestles, an adze, etc.) may be seen long slabs, flat on one side and convex on the other, with rounded ends, of which we found many, from the highest city down. These



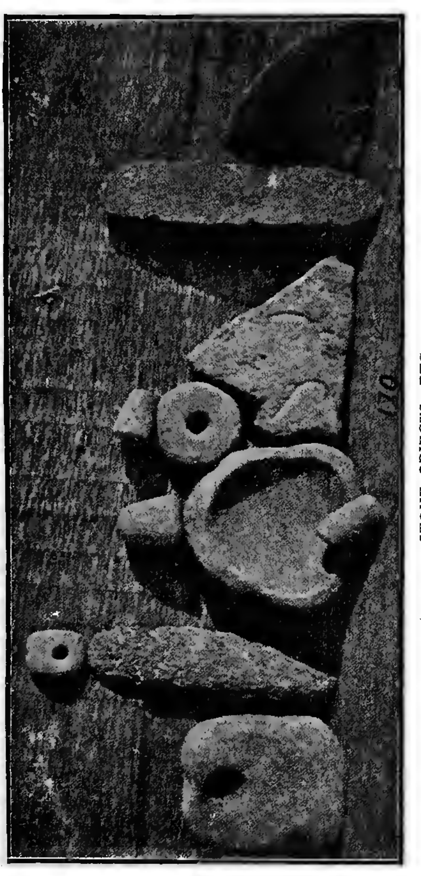

BRONZE OBJECTS.

are corn-grinders, used also in Egypt. No. 173 is a needle of bone; No. 172 is an alabaster head of a walking-staff, pierced with holes by which it might be riveted on to the stick; No. 171 represents the two sides of a button in stone.

The 15 feet of accumulation above the ashes,

including Cities Sub IV. and IV., represent the principal age of Phœnician pottery in the tell, the earliest types disappearing as we rise—viz., the lowest are the pointed-bottom juglets (No. 175; see also in cut No. 174); the rough lamps and bowls (see cut No. 174) occurred all through, and the thin, smooth bowls (No. 181) with peculiar handles, painted in bistre, were here commonest. In numerous cases we found that near walls a lamp had been placed, with a bowl covering it—that is, it had been deposited in one bowl, which was then filled with fine earth and covered by a second. As we so often found these near the foundations of walls, and in one case under the wall, it occurred to me that they might represent some ceremony connected with building a new house. In cut 174 may be seen specimens of a shape that at first sight looks like a lamp, but the lip is made much slighter, and it has a cup in the centre connecting with the bowl by a small hole at the bottom, opposite the lip. Unlike the bowls, it has a rounded bottom. It looks like a stand for a juglet of the pointed-bottom order; the water escaping from the porous juglet could find its way into the saucer through the hole, and then be poured off at the lip. These juglets must have had some stand. The form, I believe, has been found in the Phœnician pottery of Sardinia, but I have not heard of it as occurring elsewhere.

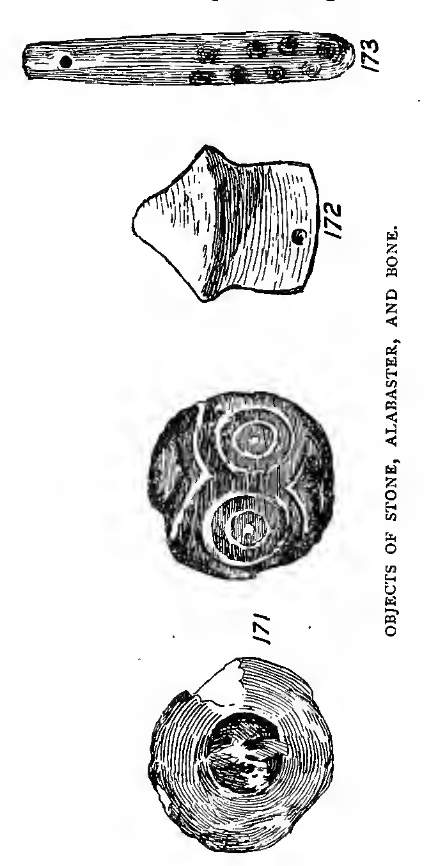
Nos. 176, 178 are fragments of bowls with spouts fastened to the side, which is pierced with holes to



STONE OBJECTS, ETC.

form a strainer. No. 185 is the cover of some vessel; the holes suggest that it was for a censer, but there

are no marks of smoke. Mr. Theodore Bent found a somewhat similar shape among old Phœnician




OBJECTS OF STONE, ALABASTER, AND BONE.

remains in an island of Bahrein. No. 175 is evidently a toy, as it is quite closed except at the two holes which look like eyes.

Nos. 179, 183, 184, 186, I found in the place marked 'Cemetery' on the plan of Dr. Petrie. They belong to the period we are describing, as similar types were found in Cities Sub IV. and IV. The

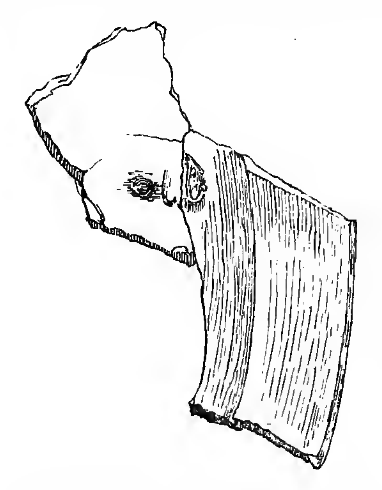


174. PHŒNICIAN POTTERY FROM TELL EL HESY.

place was quite out of the city limits, and showed no signs of occupation. Here were buried many whole jars and vases, previously filled with fine sand. Often a small vase was buried in a large jar. A very few bones, but none of human beings, were

found in connection. We have a trace of some unknown custom, analogous, perhaps, to the burial of lamps and bowls I have just mentioned as occurring in the city.

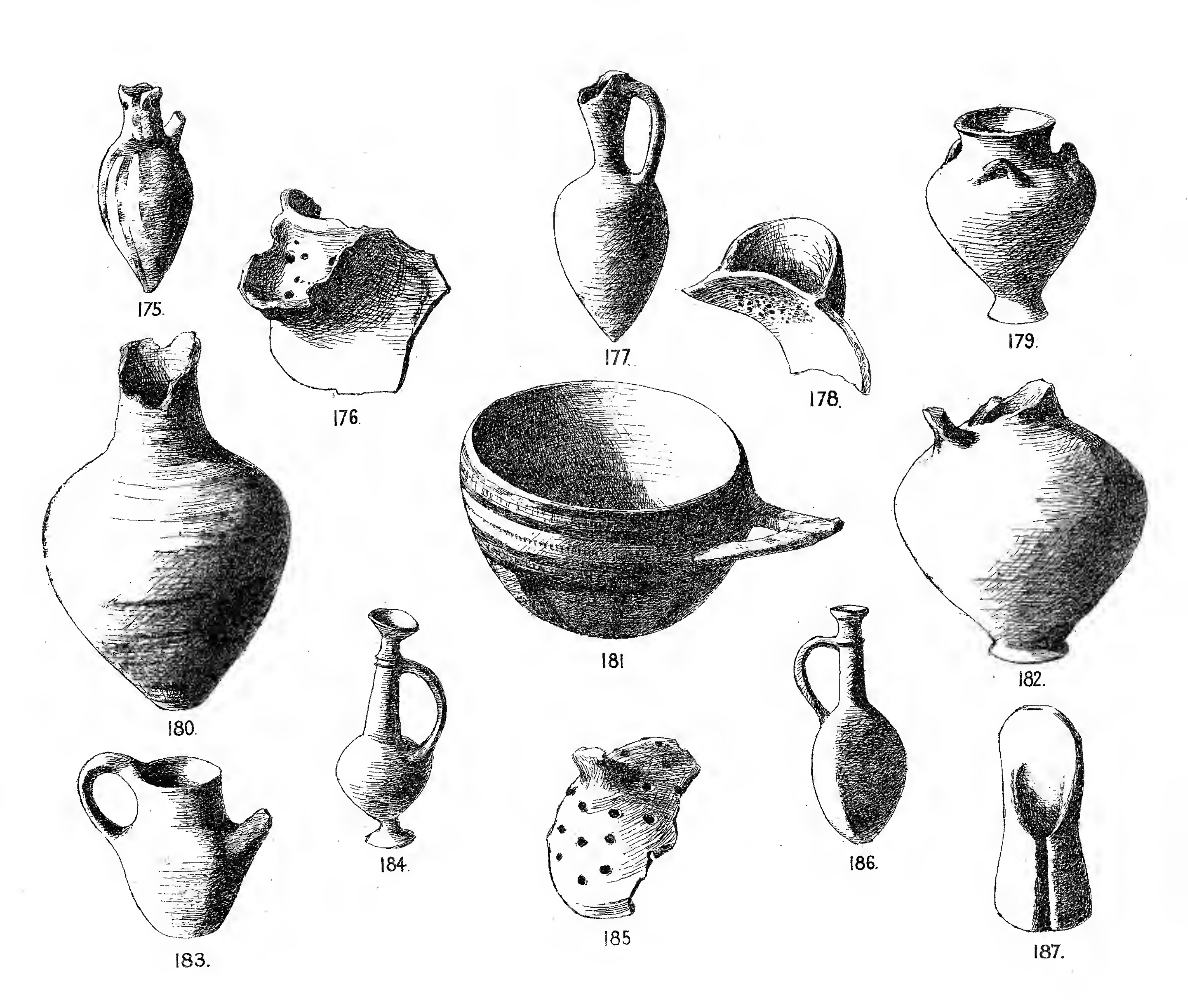
Nos. 188 to 193 represent the rough painted ware of this period. No. 188 has figures with the horns of



194. FRAGMENT OF INSCRIBED POTTERY.

an ibex—red on a white wash. No. 193 has the same red; No. 190, a purplish-red; No. 192, brown; No. 191, dark-red and brown; No. 189 is of finer paste, resembling the painted ware of City II.

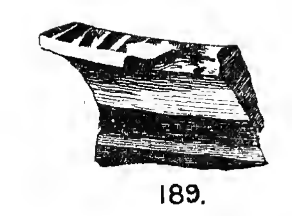
Near the top of City IV. was found the fragment of a plate, No. 194, with the three Phœnician letters. The furred edges of the incisions show that the letters were made before baking. Professor Sayce




JARS VASES &c.



188.



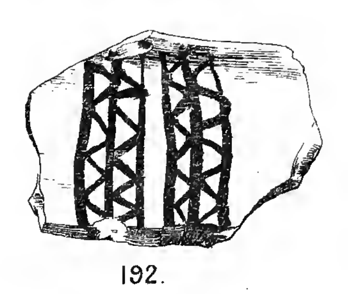
189.



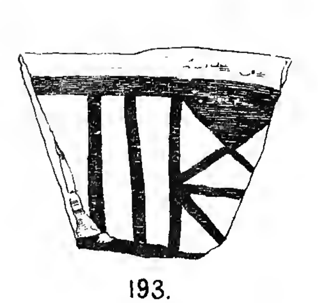
190.



191.



192.



193.

FRAGMENTS OF ORNAMENTED POTTERY

reads them בלע, 'swallow,' an appropriate legend for a dish. The form of the ב is peculiar. Near by was found a stamped jar-handle inscribed in hieroglyph, 'The Palace of Ra-aa-Khepuru,' viz., Amenhotep II.

For a detailed account of the Phœnician pottery, I refer the reader to Dr. Petrie's work on Tell el Hesy.

## CHAPTER V.

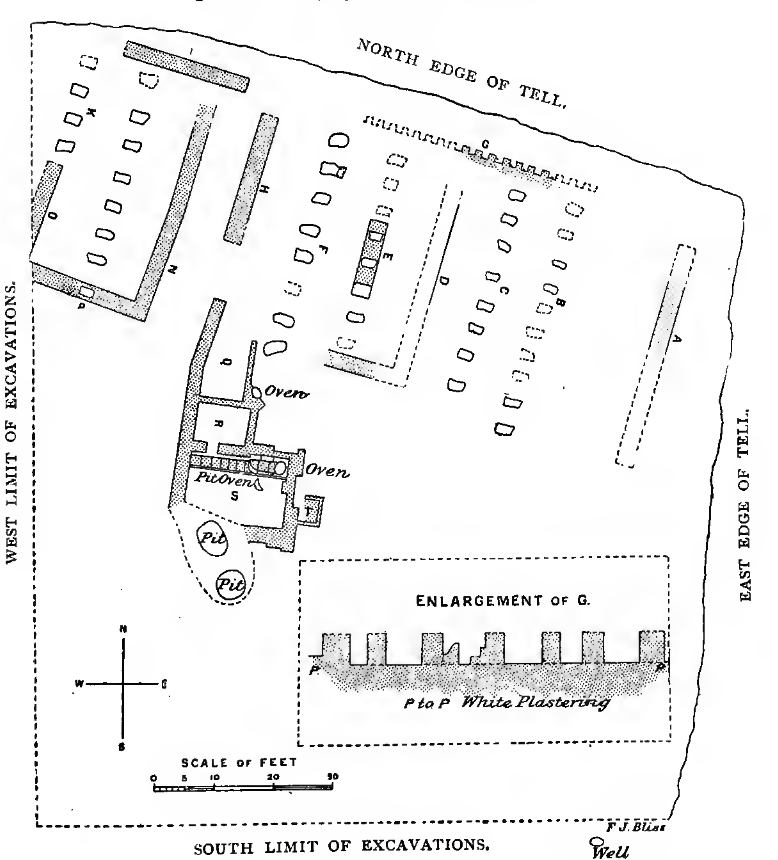
### THE FIFTH CITY TO THE EIGHTH CITY.

ON plan of City V. may be seen the remains of a curious structure found at a depth of 22 feet, 10 feet above the foundations of City IV. All that remained of this building were the roughly parallel lines of isolated stones and mud-brick wallings, worn down to 2 or 3 feet above their base, the whole covering an area 112 feet by 45. I have shown in Chapter I. how the first signs of this building were indicated by the appearance of isolated stones, one after another, until the building stood out in its rough order. The measurements of the builders were not exact. For example, the line of stones C, having the direction north, 18° east (magnetic), is exactly parallel to line B, but walling D has the direction north, 15½° east (magnetic); line E, north, 14° east (magnetic); line F, north, 17½° east (magnetic); and wallings H and I, north, 16½° east (magnetic). The stones in each line are only

# PLAN OF EXCAVATIONS AT NORTH-EAST QUARTER OF TELL EL HESY.

CITY V.

*Depth below top of mound about 22 feet.*

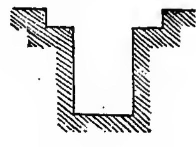


approximately equidistant; the eight stones in line C are severally, 41, 43, 45, 43, 40, 41, and 42 inches apart, and drawn accordingly. Again, the stones in one line are not opposite to the stones in another. They are of rough sandstone very roughly squared, the surfaces bearing the marks of a tool with a broad thin edge at one end, while the other end was small and rounded. Each stone was placed on a thin bed of fine yellow sand, which occurred nowhere between them. Their average size was 30″ × 15″ × 15″. Near A, B, C, and D, on a level with the top of the stones, and in some cases a few inches above their level, but never lying on the stones themselves, was a rough pavement of pebbles. I have indicated by dotted lines the places in the rows where the stones were missing, but may properly be inferred. Three stones in row E were placed on a low line of brick. Also the second stone from the north in line F was placed on a stand of brick, extending a few inches beyond the stone to the east. The walling M is at right angles with the rows, but if it belonged to the system it could not have extended far without intersecting the last stones in lines C and F. Walling P buries the last stone in line J, and is at right angles with O and N, which are decidedly out of line with I and K; so we may infer that the three wallings, O, P, and N, undoubtedly belong to a later period. The distance between A and B allows

exactly for a walling midway between them; but as no indication was found of one, I do not represent it on the plan even by dotted lines. However, if A belongs to the system, it is probable that such a walling did exist; calling this A′, then A and A′ would correspond to H and I in the system. Line K being at the west limit of excavations, I made trial trenches and cuts at the proper intervals, in search for lines of stones and wallings farther west which might connect the system with Petrie's north-west tower, but found nothing. The level of line K is from 2 to 3 feet lower than that of line A, and the level of the southernmost stone in A is higher by a foot or so than that of the northernmost stone in the same line, so that the structure slopes down from south to north, and from east to west. Under line C ran a thick wall of laid mud, not of individual brick: at the south end of C, this wall was met by other similar mud walls running west, and laid side by side, the whole forming a sort of foundation for the system of stones. From the character of the objects found near these walls (namely, the later scarabs and the Phœnician inscription mentioned in the last chapter), I am inclined to think that these were old walls of City IV. used as a foundation. This platform, formed of mud-wallings, pebbles, etc., comes to an edge at C (4 feet from the north stone of line C, and at right angles with the line), which is

a battlemented face descending vertically for 2 feet. This battlement, or, more properly, this ornamental edge, was traced for only 16 feet, but it may have edged the platform along the extent of its north face. It is strange that so unsubstantial a structure should have been preserved at all. On the plan I have enlarged it. The rough, small stones of the platform reach nearly to the edge, where their sides were coated with a layer of mud, which was covered with plaster to the thickness of half an inch, forming the back wall of the alcoves.

The partitions between the alcoves are of individual bricks put in place after the back wall (or layer of mud), for, as I have indicated in the plan by dots, the plaster occurs behind each partition. The sides of the alcoves are plastered, but the faces of the partitions were worn away, so that their exact depth could not be measured. The irregular alcove (No. 195) is a puzzle. The bricks may have been plastered before they were built in, and I would suggest this as the original form of the alcove:



195. ALCOVE.

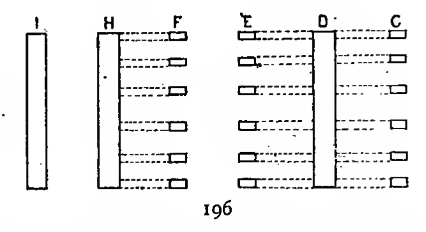
The alcoves, being only 12 inches wide, could have been intended merely for ornament.

The earth burying this whole structure contained few stones, little burned materials, and was chiefly of decayed brick and rubbish.

Having now given the measurements and other details of this singular structure, I may remark:

(1) The rough pavement extending around the isolated stones, either at their level or a little higher, but never over them, seems to prove that these stones were below the flooring of the structure. They may have been bases for small columns, probably of brick, as we find not a single trace of stone columns above. This takes the lines of stones out of the category of stone circles and similar arrangements of stones, which are themselves prominent objects above ground.

(2) Until I found the alcove bordering, I thought that each stone might have been placed under a post at the termination of a small brick wall running back to the larger walls, so that we would have a series of small chambers (No. 196):




196

We would thus have a sort of bazaar with streets between the lines of chambers. In the modern

bazaars we find shops quite as small as these—10 feet by 3½ feet. But the ornamental edge gives the place the look of some public structure in which it would be difficult to explain a lot of little rooms The theory of brick columns seems more tenable. This would give us one building with three halls, each measuring inside about 40 feet from north to south, and about 30 feet from east to west. The middle chamber, containing lines of columns (E and F), would be separated from the east chamber by the walling D, and from the west chamber by the passage contained between the wallings H and I.

(3) The decided slope of the structure, both to the north and to the west, suggests that it was not a covered building, which would naturally have a level floor. We cannot prove the absence of a wooden roof, however, by our failure to find charred wood, as such remains might have been cleared away. On the other hand, if we take the stones to be bases of pillars, some sort of a roof would naturally be expected.

(4) Whatever the place was, it occupied a large part of the city, covering about one-seventh of its area. The suggestion has been made that the building contained barracks for soldiers. I confess that the place remains a puzzle to me. The stones, wallings, and platform upon which they rest were of the same dull brown colour, and all so low as to give

little variety of shade, so that, although I tried repeatedly, I failed to get a good photograph.

The plan also contains the ruins of the interesting rooms Q, R, S, T, which, though not much above the level of the structure just described, belong to a later period, as the room Q extends over ground which must have been occupied by the large structure. Q, R, S, T probably belong to the period of O, P, N, which overlie the large structure.

The north side of room S is paved with large bricks, 19 inches by 12 by 6, separated from each other by slits, half an inch thick, filled with fine yellow sand; and one part, shut off by a thin partition, contains a mud oven built in the corner. This paved part is separated from the rest of the room by a long deep slit, also filled with yellow sand. The pit oven in room S is lower and older. I is a small outer room, which probably had no roof, with a seat in the corner. The oven outside of room Q is not a pit oven, but a rounded construction of brick, narrowing to a small mouth, in which a pot could have been placed. On its front side there is a round opening for putting in the fuel. Such ovens are found near Baalbec to-day. The fuel is kindled at the bottom, and when it is reduced to ashes, the side opening is closed with a hard piece of clay, dough is plastered in the inside to bake, and a pot is put on top.

It should be noticed that City V. is the only one of the series that does not show a north city wall. The large building seems to have taken its place. That the accumulation between City V. and City VI. is only 4 feet is probably due to the fact that, shortly after the destruction of City V. by war, the inhabitants rebuilt the place, reusing its materials for the construction of City VI.

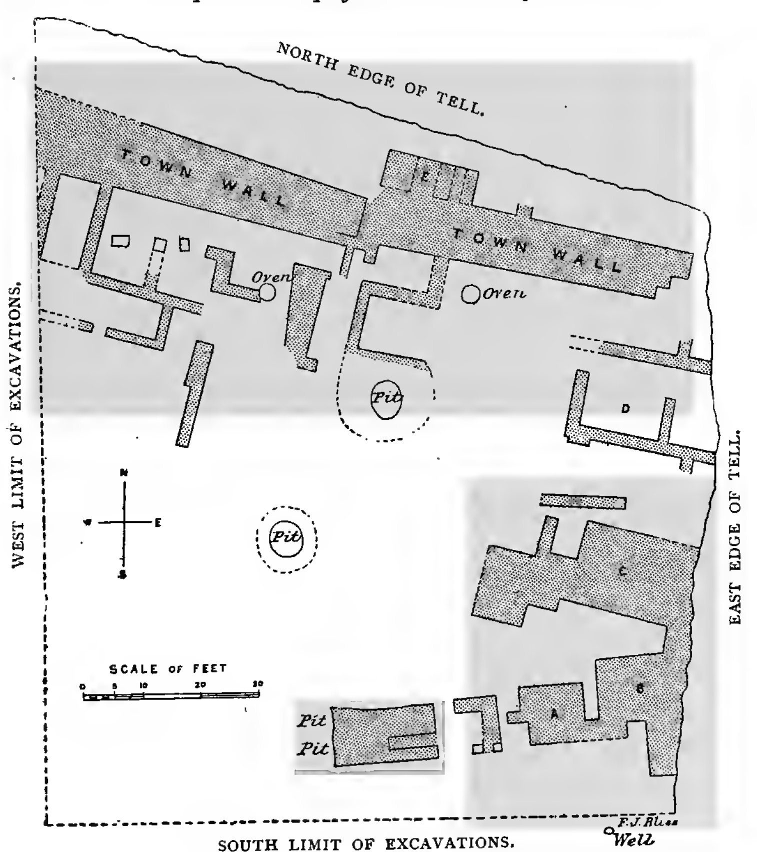
City VI. occurred at a depth of 18 feet. It was bounded on the north by the city-wall which Professor Petrie had found at this same level. He, of course, could work only along its outer edge, as its inner face was buried by the mound. I had the advantage of uncovering it completely, and my observations differ from his in some particulars.

Starting from the east edge, his wall runs for about 150 feet north, 69° west. Starting at the same point, my wall runs north, 78° west (magnetic) for 39 feet, when there occurs a platform projecting to the north. The wall then changes the direction, running north, 71½° west (magnetic) for 43 feet, after which it was so decayed that I could not decide whether it continued in the same direction, or turned towards the north for a few feet before continuing west. The whole wall gave me some trouble at first, as it was worn down to 2 or 3 feet above its base, but when I came to destroy it, I was confirmed in my measurements. For example, from the north-

# PLAN OF EXCAVATIONS AT NORTH-EAST QUARTER OF TELL EL HESY.

## City VI.

*Depth below top of mound about 18 feet.*



east corner to the platform I found decay and burned material outside my wall, while the wall itself was solid brick, with a clear face. This part rested on rough stones. At 29 feet 6 inches from the north-east corner there were remains of a thin walling running north, between which and the platform the main wall was slightly bent for 7 feet. The platform was quite clear, with decided corners at the angles it made with the wall. This may have been a tower or a gateway. I have indicated by dotted lines the solid squares of bricks which remained after the decay had been removed from the platform.

From the platform west the face was very clear; outside, the decay contained small fragments of pottery; the wall itself, when broken up, revealed none. The wall in this part rested on solid brick.

The whole city was worn down almost to its base. The thickness of walls A, B, and C makes it probable that they were the mud-brick floorings of small rooms. Room D was rectangular, the inside measurements of the north and south walls being 14 feet 3 inches, and of the east and west walls 13 feet 2 inches. The northern, southern, and western walls were 21 inches thick, and the eastern wall separating it from a room, the walls of which came to an end where the east edge is worn away, was 13 inches thick.

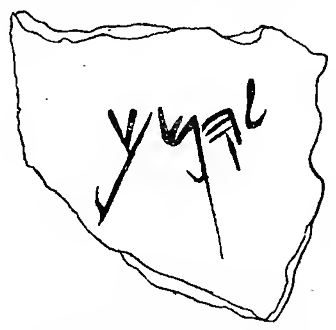
Between the bases of Cities VI. and VII. there

was a difference of 10 feet. Allowing 3 feet for the remains of the walling of City VI., we had to deal with 7 feet of accumulation, which was in general consolidated, with few marks upon it of building. Especially in the south-west part of our excavation, the soil was clayey, of a grayish-green colour, and very hard to cut through. We found many pits, which had probably been used as storehouses for corn. One had a diameter of 6½ feet, and was apparently a perfect circle. The pits were easily detected, as, naturally, the soil filling them, though not always softer, was invariably different from the soil in which they had been dug. Another pit, with a diameter of 13 feet, seemed to have an outlet, as a line of stones led to the edge of the tell. The stones were fallen upon each other, but, from the spaces between, it seemed probable there might have been a drain similar to the one found in City II. In regard to pits, I shall have more to say in describing those of the city above.

Immediately above the 3 feet of walling in the north-east part of City VI. there was simply decay; but on this decay there was building in two periods, which was used as the foundation of rooms A, B, and C in City VII.

It would seem that the 7 feet of accumulation we are discussing indicate a long period, during which there was no one time when the whole place

had to be rebuilt; a house would be deserted, and after it had crumbled to pieces the next owner of the site would build on the formless débris; this same process would be elsewhere repeated, while occasionally, as in the north-east rooms mentioned above, the successions of foundations remained, until little by little in course of time the 7 feet of soil accumulated. I know that a great



197. INSCRIPTION ON POTTERY.

depth of débris may mean either a long occupation or a long desolation, but in the latter case we should expect to find objects only or mainly at the bottom of the layer, and not scattered all through it, as in the case of the stratum under consideration.

The fragment of a neck of a jar (No. 197), inscribed with four Phœnician letters (cut in my opinion after baking), found by Professor Petrie in the débris outside of the city wall in City VI., somewhat above its

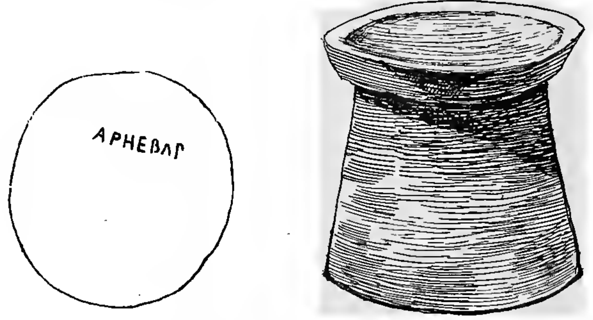
base, has caused a good deal of discussion, recorded in the Quarterly Statements of the Fund for the years 1891-92. In regard to the first and last letters (ל–ך) there is agreement in opinion, while there is considerable difference in regard to the intermediate signs. Professor Sayce, followed by Professor Neubauer, reads לסמך. He says: 'It must be translated "belonging to Samech." We find the name Semachiah in 1 Chron. xxvi. 7. The shape of the latter *Samech* is interesting, as it presents us with the oldest form of the letter in the alphabet of Israel hitherto known.

M. Clermont Ganneau reads להסך. He says: 'M. Renan, to whom I have submitted the cast, is of the same opinion. . . . The translation which obviously suggests itself is that of AD LIBANDUM. הסך is the perfectly regular infinitive of the verb נסך in the *Hiphil* form—"To pour out, offer a libation." The formula להסך (lehassek) is even employed in full in the Bible, in a manner applying very properly to the destination of the vase at Tell el Hesy, and giving it a special interest; it is where Jeremiah (chapter xliv., verses 19 and 25) reproaches the Jews with their idolatrous practices, their worship of the Queen of Heaven, and their libations (drink offerings) to her: להסך לה.'

Major Conder takes the second character to be a combination of two, and reads להנוך. He says:

'The translation in this case is very clear. In Aramaic, we find the root הנא "profit," "health," "wholesomeness," and in Arabic هنأ has the same meaning. When a guest drinks water at dinner, his host says *Henean* . . . the meaning of which is "may it profit you," or "may you digest."'

Another Semitic scholar, writing anonymously, reads להמך, 'dedicated or belonging to *h m k*.




198. STAND FOR LAMP.

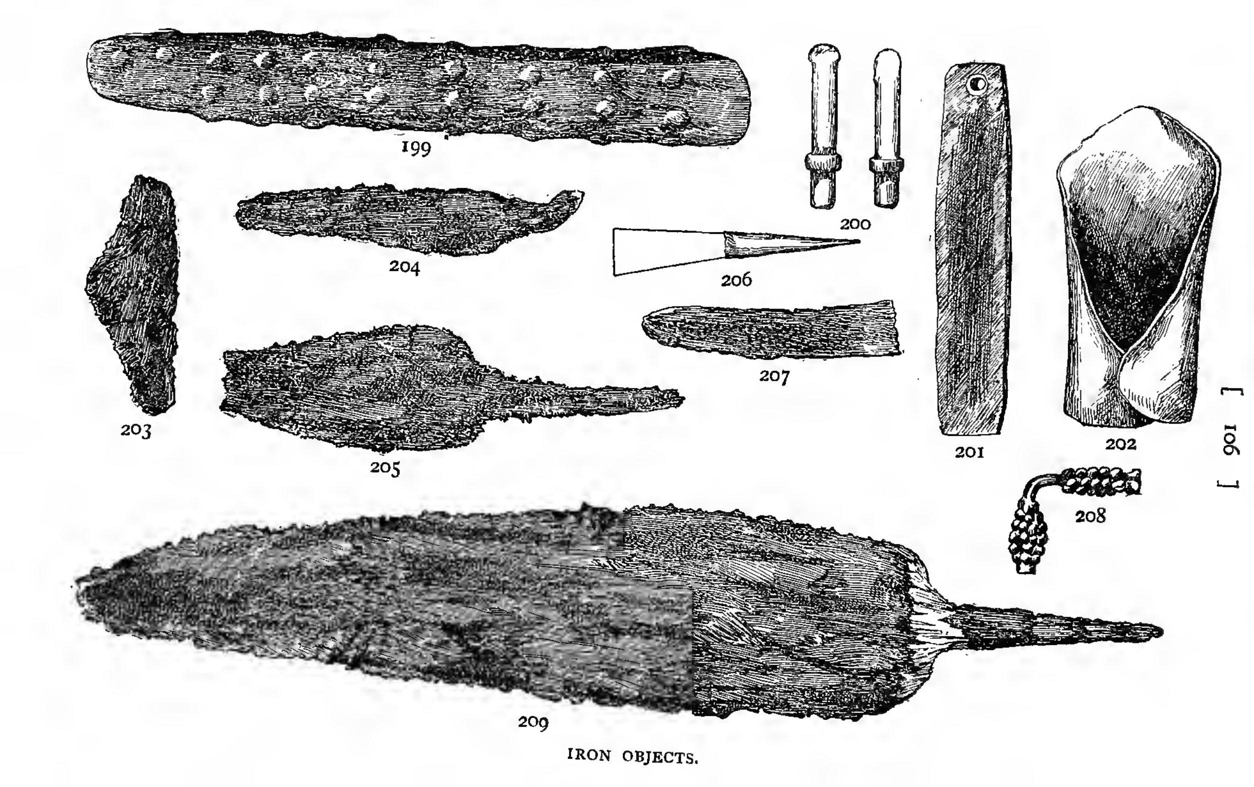
Whether this *h m k* is a name of a divinity or of an owner I cannot decide. I do not know of another instance of this name.'

About midway in this accumulation occurred a small rude stand of soft limestone, evidently for a lamp, with seven Greek letters scratched across its base, but out of the centre. The letters (cut 198) were made very carelessly, and may be only the work of an idle boy who carved without any meaning. A P H E B A Λ has been suggested as a

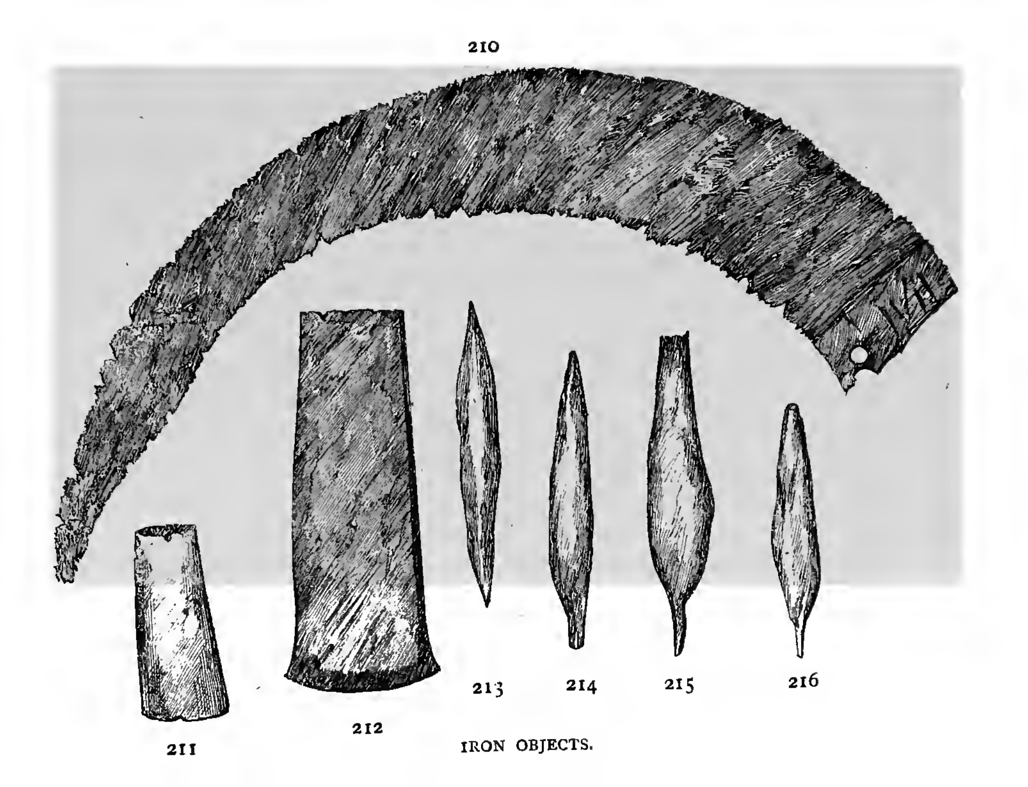
possible reading; it might be a Phœnician name, compounded with Bal.

Bronze occurred all through these periods. The following objects occurred in Cities V. and VI., and the upper part of City IV. No. 200 may have been a pair of goldsmith's tongs—the parts were found stuck together; No. 204, a knife-blade; Nos. 218 and 222, long pins; No. 219, a long needle; No. 217, a bracelet or anklet; Nos. 220 and 221, tubes or blow-pipes, possibly for use in goldsmith's work; No. 202, a hoe—the type is found in Egypt (see also No. 187); the handle fitted in where the parts fold over; No. 208 is evidently the handle of some vase; No. 206, a scraper; No. 212 is an adze, belonging to the upper part of City IV., and suggesting the early Amorite types.

Objects in iron occurred from the top of the mound down to the upper part of City IV. The following were found in Cities V. and VI. and in the upper part of City IV. No. 209 is a large knife, which fitted on to a wooden handle, as a few slivers of wood still clinging to the end show; Nos. 211 and 205 are probably fragments of spears; Nos. 213 to 216 are lance-points, No. 213 being the most rounded; No. 199 is like a cold chisel, rounded at one end and with an edge at the other. It is very much rusted, but the knobs were probably on it originally. No. 210 is a sickle; it has a small knob



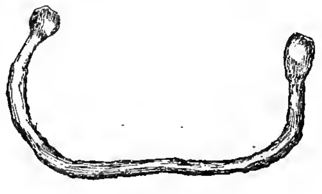

IRON OBJECTS.




IRON OBJECTS.

at the end, and traces of wood where the handle fitted; the marks on it merely represent rust, and indicate nothing in the structure. No. 207 is a knife-blade; Nos. 199 to 223, except No. 202, are reduced one-half.

City VII. was at a depth of 8 feet. Its preservation is due to the fierceness of its destruction! This paradox is of frequent occurrence in excavation. The characterless débris below this level we have assigned to a peaceful period when each dwelling

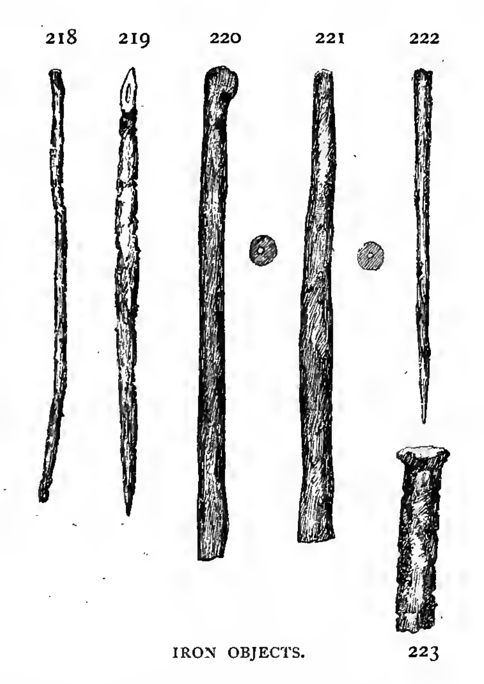


217. IRON OBJECT.

was rebuilt at a separate time. City VI. might have left as few traces had it not been buried almost to its foundations; these foundations were suddenly buried in débris, and thus served as a platform for the next city.

Signs of fire were everywhere visible. Sun-burnt brick had been changed to fire-burnt brick. Ashes lay almost everywhere, in some places to a considerable depth. Near the east side was a curious stratification of fine, clear yellow sand, covering an irregular space, 17 feet by 10, on an average

6 inches deep. In some cases the sand overspread stone pavements. In one place it lay between two strata of burnt stuff. It looked as if the sand had been a heap collected for making mortar, and, after the houses had been destroyed by fire and the place




IRON OBJECTS.

deserted for a time, had been blown by the wind into the wavy stratification in which we found it.

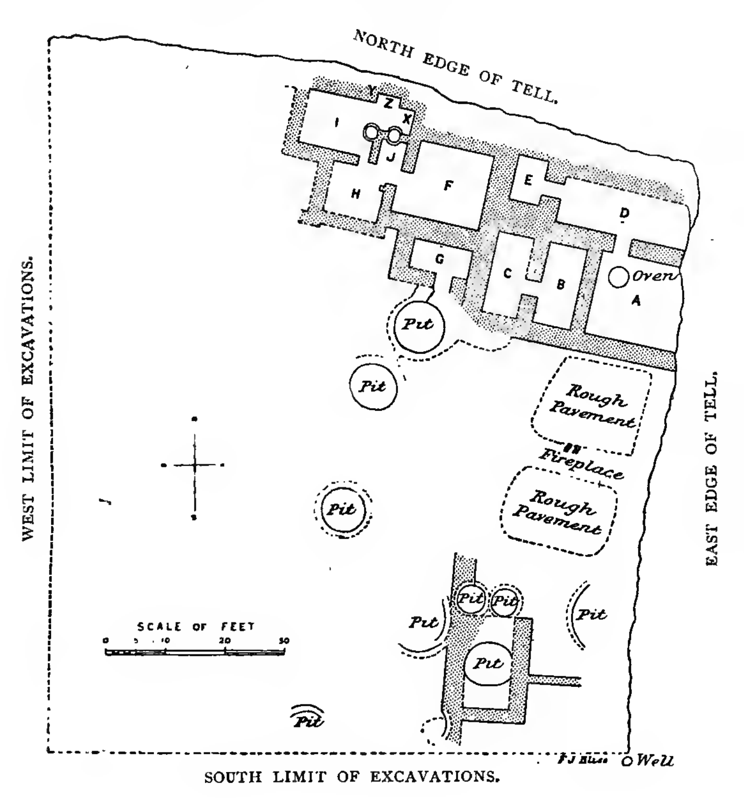
At this level many pits occurred. These were irregularly circular, with diameters varying from 5 to 9½ feet. In some cases they had been lined with

mud, which by a sharp tap of the pick could be made to fall off from the sides. Some had a fine coating like ash on walls and flooring. A blow of the pick sometimes revealed this infinitely fine white coating, which had remained for hundreds of years. In the modern villages of the district, as in other parts of the country, notably the Hauran, pits for storing grain are still used, but they usually narrow towards the top to a small mouth, which is closed by a stone. The pits in the tell had straight sides, 3 or 4 feet high. I think, however, they were granaries, the narrowing upper parts of their walls having been destroyed. If the original depth of the pits was 10 feet, they should be assigned to City VIII.; indeed, this is proved by the fact that in some cases they are dug down into the walls of City VII., as a glance at the plan will show. One pit had deep rat-holes in its sides. Grains of wheat and barley were found in several of them. However, that these were remains of what had been stored in them is not clear, as in this fiercely-destroyed city I found a stratum of burned barley covering an open space 10 feet square, to a depth ranging from 2 inches to a foot. We also found burned sesame, pulse, grape-seeds, etc. A curious incident in this city was a quantity of snail-shells, hundreds in number, forming quite a feature in the stratification. Snails had doubtless been used for food. A ruined fireplace

# PLAN OF EXCAVATIONS AT NORTH-EAST QUARTER OF TELL EL HESY.

## City VII.

*Depth below top of mound about 8 feet.*




SOUTH LIMIT OF EXCAVATIONS.

looked as if it might have had compartments on either side for baking. Pit-ovens also appeared. Several door-sockets turned up.

At the north end of the city we uncovered two houses in very fair condition; I speak of them as two, for, though contiguous, there seems to have been no door between them. The east wall of room A is worn away by the destruction of the cliff. A brick taken from its outer-built wall measured 20 by 10½ by 6½ inches. The inside bricks were smaller. The bricks were plastered over with a mud coating. Room A contained an oven in the floor. The north and south walls were 3 feet thick, and west wall 2 feet 7 inches. The floor of room B was 6 inches higher, and was spread over to a depth varying from 5 to 8 inches with burned barley. The brick, originally of a brown colour, containing little straw, was burned to a salmon colour by the fire which had destroyed the grain stored for some winter 2,500 years gone by. Between rooms A and D, D and E, B and C, doorways were found 2½ to 3 feet wide. Between E and C and E and F, the walls were 4 feet thick. Between F and H the wall was only 1 foot 8 inches thick. These houses were built against the north city wall, but in the city below we found the face of the city wall a few feet further in, *i.e.*, to the north, showing that the city wall was thickened in the later city. In room C we found a stone about a

yard long, roughly scooped out to hold water, possibly for a smith to dip the iron in. The walls of the rooms F, G, H and I were built of a redder brick, containing more straw; H had been fiercely burned, and many fallen bricks were found so hardened by fire that it was difficult to break them with a hammer. To the west of H we found many weavers' weights of unburnt brick. Some were round, some shaped like pears or turnips. They varied from the size of a top to that of a large fist. I find in the weavers' places in Beirût rough stones used as weights, but no artificially rounded stones or brick-weights as at Tell el Hesy. It is strange that we should not have found these objects between Cities II. and VI. In room I were many jars, mostly broken, some containing seeds. The pottery had a dirty, oily look; possibly oil had been stored in this room, which may have accounted for its fierce conflagration. The recess (Z) in the north wall of this room had a place like a seat, and to the left of this was a higher recess (Y), like a modern *yuk*, where beds may be placed in the daytime. In the wall of the recess (X) there were holes scooped out, such as are found wherever mud-houses are built for storing small objects. The walls here were good to a height of 3 or 4 feet. J is evidently a small storeroom, with a partition which never went to the roof. At first we supposed the round constructions to be pillars, but finally decided

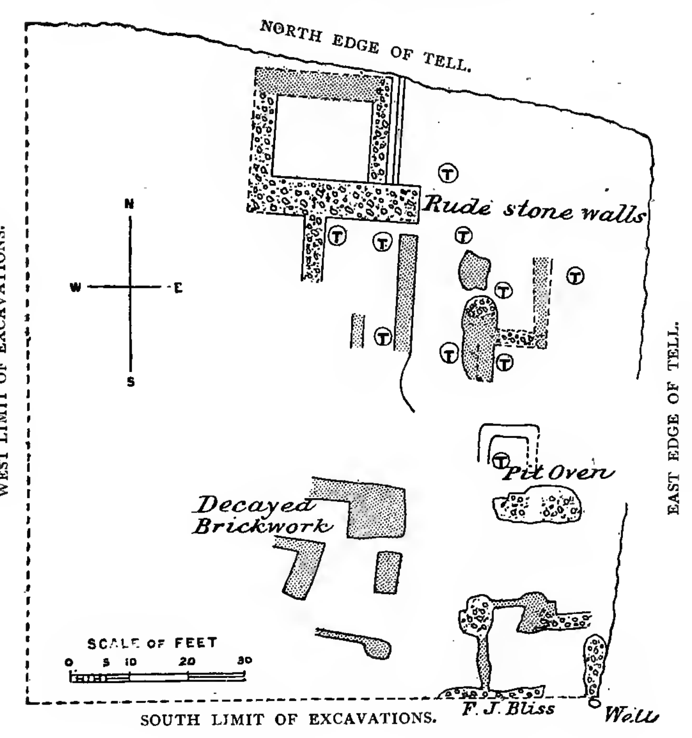
that they were originally hollow, evidently places for store. The western partition was of one thickness of large bricks, one taken out whole being 20 by 20 by 5 inches. This closet was also filled with burned cereals, some of which were clinging to the mud plastering.

The base of City VIII. was only 4 feet above the fiercely-burned foundation of City VII. As between it and the surface there were only a few feet of soil (four at the north end), it was very much decayed owing to the surface moisture. Indeed, as stated in Chapter I., the few ruined walls found would have been hardly enough to establish a distinct period, had not the dozen *tannûrs*, or pit-ovens, occurring at intervals over the area, showed that the tell had been again occupied after the destruction of City VII. by fire. The ancient inhabitants of the tell baked their bread in the same manner as the modern Syrians bake theirs. A pit is sunk in the floor of the house, or in a hut outside, 2 or 3 feet in depth, and is plastered with mud, which is built up for a few inches above the floor. The ground is levelled at the bottom of the pit, and salt is placed upon it before the layer of mud is plastered down. My man, Yusif, found salt in place under the mud. The *tannûrs* we found were irregularly circular, one having an average diameter of 33½ inches, another of 31½ inches. The sides were baked hard, showing

# PLAN OF EXCAVATIONS AT NORTH-EAST QUARTER OF TELL EL HESY.

## CITY VIII.

*Depth below top of mound about 5 feet.*



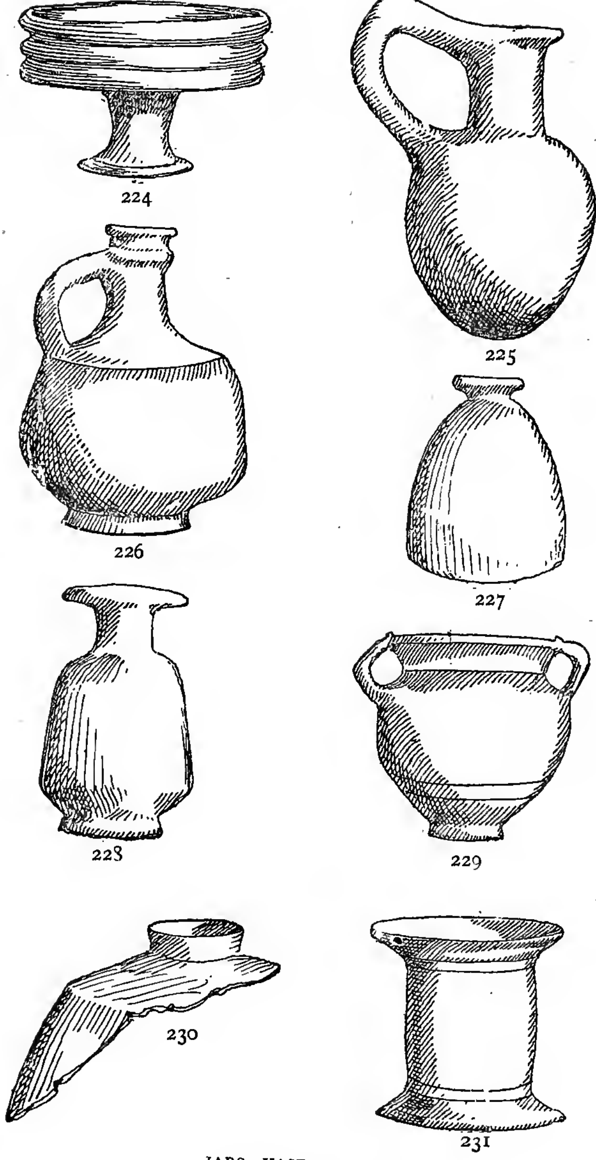
use. I may explain that a fire is made at the bottom of the pit, and the dough, flattened out by hand, is stuck against the heated sides to bake. The first *tannûr* we found had been repaired by potsherds where the mud sides had given way. A small pit with a diameter of 22 inches, and with thick sides of yellow brick, may have been used for storing corn.

In one place we came across a quantity of fine red earth, unmixed with the surrounding decay, such as is used to-day in colouring the mud floors and walls, which are then polished. Here, as in almost all other periods, we found jars buried with intention. Near one of the ovens a jar, 24 inches high and 44 at its largest circumference, was found lying on its side. It was evidently filled with fine soft earth after it had been put in position, as the earth seems to have been pressed down by hand, being lighter on top. It contained bones, a stone, a flint, and a potsherd.

A study of the section giving the levels of cities on Plate II. will show that the depth of accumulation in Cities I. to IV. is greater at the north end than at the south, while in Cities V. to VIII. it is practically uniform over their areas. A glance through the plans will easily explain the reason: the chief buildings were at the north end of the cities, giving rise to more débris, so that gradually

the slope from south to north (originally following the contour of the hill) grew less and less, until the areas became practically level in the cities described in this chapter.

The characteristic pottery of Cities V. to VIII. was the Jewish, *i.e*, coarse copies of the older Phœnician types. No. 225 suggests a clumsy imitation of No. 177; the stumpy and ungraceful No. 239 suggests No. 184, which, notwithstanding its crooked neck (almost an invariable characteristic), is of a more delicate form; No. 240 is an example of a very common type of purplish ware; small vases like No. 242 were common; some were so thick that they could have contained but a couple of drams of liquid; No. 231 is hollow like a drain-pipe, but is probably a stand for a table-board, as found in Egypt—we found more slender shapes in the Phœnician ware; No. 234 is a graceful, unique specimen made of fine paste, somewhat polished, with rings of sienna, probably Greek, belonging to City V.; No. 241 is a child's rattle with a bit of stone or pottery inside—a workman found another rattle above, but he unfortunately lost it before reaching my tent; No. 224 belongs to the top of City IV.—it is of alabaster, and with one similar was found purposely buried with large jars and Phœnician bowls; No. 283 is the fragment of a dish like those figured in cut No. 174; No. 244 is a rough painting of an ibex.



JARS, VASES, ETC.




JARS, VASES, ETC.

238

239

240

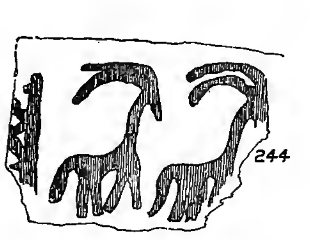
241

242

243

JARS, VASES, ETC.

Certain types of Greek pottery had about the same range as the Jewish, though not appearing quite so early. They occurred in City VI., and on to the top. Among these are the thick drab bowls, with a smooth, spherical inside, and ribs outside;






FRAGMENTS OF POTTERY.

the massive loop-handles, quite ten inches long, for jars a yard high; a Greek development of the Phœnician lamp, with a rude flat brim (No. 237), and the knob-shaped bottoms of vases (No. 236).




BONE OBJECT.

The last two shapes I have drawn, for the rest I refer the reader to Petrie's book. The bone object No. 256 was found here. The type is described in Chapter II.

Specimens of the well-known polished red and black Greek ware appeared from the top of the tell

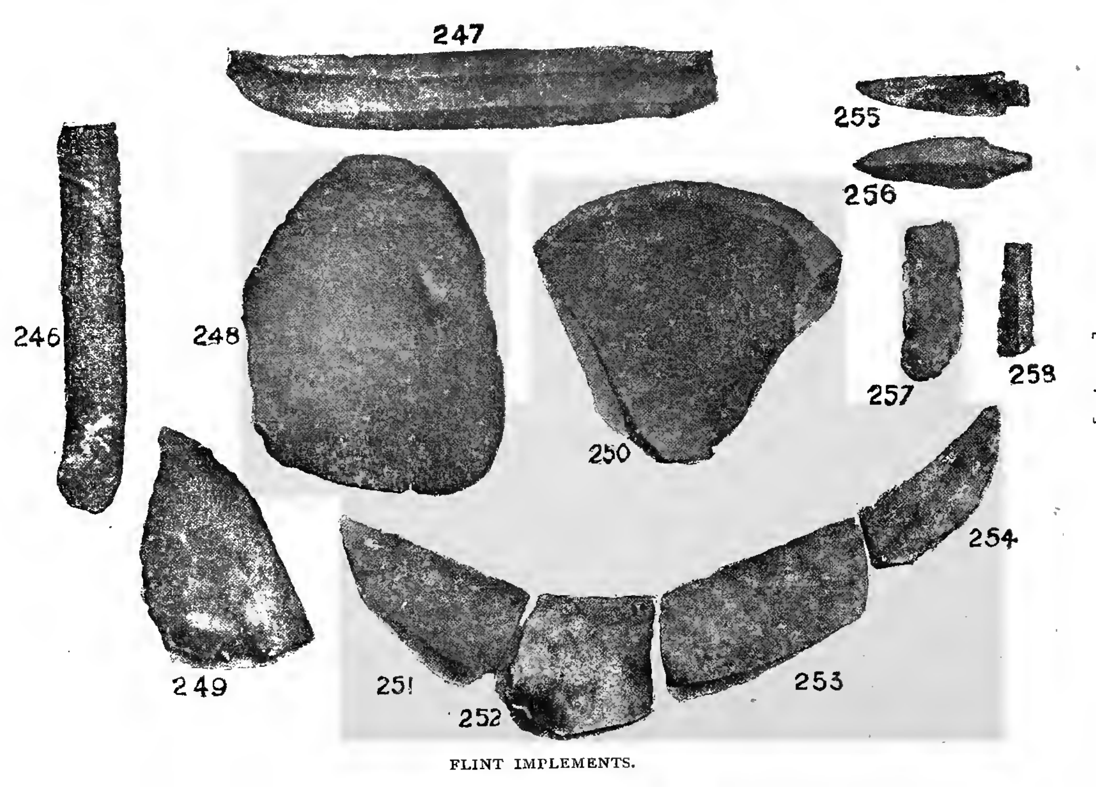
down to the higher layers of City VI. No. 245, with a red pattern on black ground, was found in the south-west part of City VI., where there was little building. Of course, in dealing with a single piece of pottery, we cannot be sure that it belongs to the level where it was found, unless it occurs inside a room. The piece dates about 400 B.C., and as it is difficult to assign so early a date to City VI., it is probable that it belongs to the period of City VII. or VIII.

In the four feet of rubbish above City VIII. were many rough stones from the river-bed; in one or two cases built into rough walls, in others laid in a rude pavement. They may belong to the period of City VIII. Immediately under the surface we found many graves. One grave was in a perfect condition—a space hollowed out in the shape of a coffin, with slabs placed across the top. It contained a skeleton, the skull being towards the east, and bracelets made of blue glass, such as are worn to-day. In connection with human bones and other supposed graves, there were bracelets of glass and of twisted brass, with anklets, precisely such as may be bought in any Arab market, beads and agates, such as the Arabs bury with their dead women. Thin glass was also found; also pipe-heads, of a somewhat different shape from those in use to-day. A brass medal of the time of Abd el Hamid, notched

so as to be tied under the chin, may or may not belong to the grave period, as it might have been dropped by a woman tending the crops on the hill. Another grave had not only slabs laid across it, but was partially lined with stones. This graveyard is undoubtedly Arab, and may not be more than two or three centuries old. I place it as far back as that because, until we covered it, its existence did not seem to be known, no objection being made to my digging there by the Arabs. The method of burial is such as obtains to-day.

Flint implements were found in great quantity from the top of the tell to the bottom. The sickle-flints (Nos. 251 to 254) were common in all periods. The best work (Nos. 246 to 250) was found in the lowest layers, before iron had come in, and when presumably all metal was more scarce. In Appendix D. will be found the valuable notes made by Mr. F. C. J. Spurrell on the flints.

As we have now described the remains of eleven cities, the chief material of which was sun-dried brick, it will be well, even at the risk of repetition, to sum up here the features of this form of architecture as found at Tell el Hesy. I have before me the valuable paper read by Mr. William Simpson before the Society of Arts on 'Mud, a Material in




FLINT IMPLEMENTS.

Persian and Eastern Architecture,' to which I shall refer for comparison.*

I found various sorts of foundations. In City Sub I. a trench, 8 feet deep at the point C, had been dug in the native clay, and the foundations of the great tower had been built in it. In City II. all that remained of the rooms E, F, G, H were lines of rough stones built in mud, ruined down below the level of the door-sills, which may have been the foundations of walls of pure mud brick above; this would be analogous to the modern Persian foundations of mud buildings described by Mr. Simpson, and also to the same method used in Devonshire known as a 'good pair of shoes,' as it keeps the 'feet of the wall' dry. Under a part of the city walls in City VI. a layer of large rough stones formed a foundation. Some of the walls in City Sub IV. were built down into trenches dug in the consolidated bed of ashes. The large house in City IV. was built on the solidified rubbish of the city below, with a layer of sand placed directly under the walls. The base-line of the walls rose and fell, probably following the *hardness* of the rubbish below. Under the pillared halls in City V. was a platform of mud walls and rude stones. I

* Mud brick has been the usual building material of the world, except during the Roman Empire and in modern times, when in Europe it has given place to burnt brick.

have shown that old wallings had probably been utilized. Rooms A, B, and C in City VII. were built directly on ruined walls of the city below.

Mr. Simpson shows how the modern Persians often build their walls with a broad base to give solidity below, and with a marked batter upwards to reduce the weight above. He finds in this the explanation of the very marked shape of the perpendicular lines of the Egyptian pylons. This is the regular system in Egyptian brickwork. It is interesting that in the wall A—B of City Sub I., which antedates the eighteenth dynasty, I have found the same batter.

That mud brick was used at Tell el Hesy in buildings of importance, when symmetry and exactitude were required, is shown by the buildings in Cities III. and IV., where the walls are at perfect right angles to each other, and where the thickness of corresponding walls was the same within an inch or two. In the modern mud villages of the district I find no such symmetry; but at a ruin in a place called Mazinan, within the Chorassan frontier, Mr. Simpson found a building in the interior of which the lines were perfectly straight and at right angles to each other, comparable to the best houses in London. The handsome niches he observed all around the wall remind us of the ornamental border found in City V. at Tell el Hesy. This is the constant system of early Egypt and Babylonia.

In many cases we found that after the walls had been built in courses of mud brick, a thin face of mud (without straw) had been plastered over their surface. The amount of straw used in different brickwork varied a good deal. The prevailing tone of the bricks was fawn colour, while others were dark brown.

Professor Petrie measured many of the bricks, and finding that their size varied greatly, not only in different walls, but in the same wall, concluded that there was no fixed gauge for bricks at any one period, as there was in Egypt.

Unfortunately, the walls at our tell were ruined down so far that we could draw no conclusion in regard to the roof, or as to the question of the use of the arch or the dome.

## CHAPTER VI.

### CHRONOLOGY OF THE TELL.

In the foregoing chapters we have proved that Tell el Hesy consists of stratified layers, each layer representing the base of a city; we have described the condition of each city-base, with the objects found; the question now arises: Has our work furnished sufficient clues for dating the various layers of the mound? In the present chapter I hope to show that an approximate dating is quite possible.

In my attempt to form a chronological scheme, I have been guided by the following considerations:

1. An accumulation of 60 feet of débris over a large area must in any case have taken a long time.

2. This time can be divided into periods by the different layers proved to represent eight mutually excluding city-bases.

3. These eight layers do not represent all the rebuilding in the tell, for signs of the rebuilding of

individual houses have been detected in several of the layers.

4. The materials for dating these layers should be given, if at all, by the objects *found clearly in situ* in the various city-accumulations.

5. The objects should be studied in the following order: (a) *the inscribed objects*, including the cuneiform tablet, the Greek and Phœnician inscriptions, the jar-handle, and some of the scarabs; (b) *the figured objects*, including the cylinders and the rest of the scarabs; (c) *the metal tools and weapons;* (d) *the pottery*.

6. If two layers at different altitudes are dated by objects of known age severally found in them, the intermediate layers may be assigned to intermediate dates according to the nature and amount of accumulation.

7. If dates have been assigned to the limits of a city by a consideration of objects dateable in other countries, we may assign to the same periods objects, otherwise undateable, found in the same city.

8. It is legitimate to assign in general to the limits of the Phœnician pottery found in the tell the dates corresponding to the range of the same pottery as known in Egypt, Cyprus and other places. The same rule applies to the Greek pottery.

9. If independent investigations of the inscribed objects, of the metal articles, and of the pottery

result in the same general conclusions as to the dates of any given level, these results are mutually confirmative, and may be held to approximate closely to the true chronology.

(a) The *Inscribed Objects* are as follows:

1. *The Tablet.*—This has been discussed fully in Chapter III. We have seen that it dates about 1450 B.C. It was found in City III. in the stratum overspread by the great ash-bed, hence cannot be later than the ash-bed.

2. *The Scarabs.*—It will be convenient to discuss them all here, though the merely figured ones are of less value than the rest. No. 115, made of schistose limestone, evidently belongs to the period between the twelfth and eighteenth dynasties, as the arrangement of signs in parallel columns goes back to the twelfth, while the rudeness of the signs shows that the type has been brought down somewhat later. It has the hawk wearing the crown of Lower Egypt, and other signs resembling Egyptian hieroglyphics, but badly formed. It may be a Syrian imitation.

No. 117 is of a bluish-gray paste. It reads 'Good son of Amen Ra.' From the style, it appears to be not earlier than the middle of the eighteenth dynasty and may come down to the nineteenth. No. 116 contains the name of Amen Ra, with lotus ornamentation. It is not earlier than the eighteenth dynasty. These three belong to Cities II. and III.

No. 119 contains the cartouche of Queen Thii. The cowroid form of the scarab indicates that it was made at her time, during the middle of the eighteenth dynasty. No. 118 reads 'Um-nefer,' the name of Osiris. The flatness of the back of the scarab is characteristic of the early part of the eighteenth dynasty, probably 1,500 B.C. No. 121 is evidently a copy of Egyptian styles, perhaps Phœnician. It has the god Hapi standing, holding altar decorations. No. 120 is Syrian work. No. 122 shows Nile plants; the style is not later than the middle of the eighteenth dynasty. Nos. 118-122 were found in City Sub IV.

No. 123 contains the name Ah-Hotep, a name borne by the wife of Amenhotep I. of the eighteenth dynasty. No. 124 has the Uraei, characteristic of the middle of the eighteenth, but it might come later. No. 125 has the god Ptah with worshipper. The standing figure of Ptah occurs in scarabs of Rameses II., and may come down to Rameses III. Nos. 123-125 were found in City IV.

It is noticeable that we find scarabs with eighteenth-dynasty patterns from City II. up through City IV. Two of the scarabs in City Sub IV. are early eighteenth-dynasty, not only in pattern, but in make. Hence they help to date the base of City Sub IV. about the middle of the eighteenth dynasty, or 1400 B.C. The one scarab of the eleven that is clearly

later than the eighteenth dynasty (No. 125) occurred *above* City Sub IV., near the top of City IV., and the one that is clearly far more ancient than the eighteenth dynasty (No. 115) occurred below City Sub IV., namely, in City II. As the ashes above the tablet prove that it had not been shifted below its original level, so eighteenth-dynasty scarabs found near it suggest that it was not found much above its original level; hence we may with considerable confidence date the base of City III. at 1450 B.C., and the base of City II. at 1500 B.C. From the small amount of accumulation above City III., from its thoroughly ruined character, and from the similarity of its scarabs, as well as of its potsherds, to those of City Sub IV., we may argue that it was destroyed soon after it was built, that the period of the ashes immediately followed, lasting about 50 years, and hence, as suggested above, that the date of City Sub IV. is probably near 1400 B.C.

In arguing for the limits of time of City IV., we must take into consideration the nature of accumulation over City Sub IV., which showed much rebuilding, probably representing a century, as well as the 10 feet of accumulation of City IV. itself, which, together with the eighteenth-dynasty scarabs, contained a scarab of the nineteenth dynasty. Assuming this to be of Rameses III. (which has been shown to be possible), the top of the city might easily

be a century later. This would give us 1300—1000 B.C. for the two limits of City IV.

3. *The Phœnician Inscriptions.*—The inscription בלע (see p. 88). This was found near the top of City IV. Professor Sayce holds that the writing cannot be older than the eleventh century B.C. This is the date which the scarabs led us to assign to the top of this city.

The inscription found by Dr. Petrie above the base of City VI. M. Clermont-Ganneau and Professor Sayce agree that the date of this is pre-exilic. The latter would place it at 700 to 800 B.C.

4. *The Stamped Jar-handle.*—This was found near the inscription בלע in City IV. The hieroglyphics read, 'The palace of the Ra-aa-Khepuru,' namely, Amenhotep II. This name of course carries us far earlier than the date we have assigned to this level. But as a variety of considerations (some of which remain to be mentioned) have led us to the adoption of such a date, we must conclude that this handle had drifted along the chronological stream —in other words, had been dug up in ancient times from lower depths.

5. *The Greek Inscription*, found midway in the accumulation over City VI. This is so rude that, taken alone, it would be of doubtful service. The letters, however, are very similar to those used by the Greeks at Naukratis in the sixth century B.C.,

though the forms come down much later. The Phœnician inscription near the base of this city helps us to date its foundation about 800 B.C. We have seen in Chapter V. that the accumulation of 7 feet over the 3 feet of walling was of a nature to make us infer a long duration; hence this rude inscription, not improbably of the sixth century, confirms us in assigning the date 500 B.C. to the top of City VI.

(b) *The Cylinders*, Nos. 129, 130, belong to City Sub IV.; Nos. 126 to 128 to City IV. The only one that suggests a date is No. 128, which occurred near the top of City IV. The glazing seems to be Bubastite, which would place it no earlier than 1000 B.C.; this accords well with the limit fixed for this city. We may inier that the other cylinders belong somewhere between 1400 to 1200 B.C.

(c) *Objects in Bronze* were found all through the tell from City I. to City VIII. The most characteristic are the earliest, and, as they differ in shape from weapons and tools found in Egypt and elsewhere, they furnish us no clue to date. Objects may either date a level or be dated by a level, and we cannot speak of their age till we have otherwise dated City I.

In the *Iron Objects*, however, we may hope for a general clue. These we find from the top of the tell down to the top of City IV., where they ceased, not

reaching the base of the city. Iron tools have been found in Egypt belonging to the ninth century B.C. It seems probable that iron would have been found as early as this in Syria, as the two kingdoms of Israel and Judah had attained a fair degree of civilization. It is reasonable to suppose, then, that the top of City IV. is not later than the ninth century B.C. Other considerations have led us to put it back as far as 1100. If these are correct, we get an earlier date for iron than has been proved in Egypt.

(d) I now come to the *Proof from Pottery.* Unless the reader totally refuses to admit this sort of evidence, he must agree that it could never have a higher value for chronological argument than it has at Tell el Hesy, where each city or group of cities is characterized by especial types and styles, most of them known elsewhere, and where specimens were found, not by the dozen only, but by the hundred and thousand. I have placed this argument last because, in general, inscribed objects are unquestionably of greater value for dating than pottery, especially the ruder styles; but, unfortunately, the testimony furnished by the inscribed objects here was small, owing to the paucity of these expert witnesses, whereas the humbler witnesses appeared in great numbers, invariably confirming not only each other, but the experts as well.

We have shown that the Phœnician styles, be-

ginning to appear in Cities II. and III., became the predominant types of Cities Sub IV. and IV., gradually growing less in the cities above. Dr. Petrie's work at Tell el Amarna in 1892 shows that the lamps (see cut 174), the pointed-bottom juglets (No. 177), the thin flasks (No. 184), and the thin painted bowls with curious handles (No. 181), were well established in Egypt in 1400 B.C., while his previous work at the Maket Tomb at Illahun proves that all these styles, except No. 181, were still in full force in Egypt in 1200 B.C. Specimens are found as late as 800 B.C. This is also the general range of this ware in Cyprus. Now, 1400 to 1100 B.C. are the dates we have previously fixed upon for the layers in Cities Sub IV. and IV., where the Phœnician pottery was found at its best. The pottery here is not only confirmative, but shows that the other objects were found *in situ*.

From the top of the mound down through Cities VIII. and VII. was found the polished red and black Greek ware. The range of this pottery is well known to be from about 550 to 350 B.C. Fragments of this ware were also found in the higher layers of City VI., but I do not remember finding them near the edges of the tell where the remains of buildings occurred. We cannot be sure, then, that they actually belonged to this city. Among them was a fragment (cut 245) with a red figure on a black

ground. In this style of ware the black figures on red are the earliest types, the red on black not coming in before 480 B.C.; but the style of this specimen is later, about 450 to 400 B.C. The prevalence of this ware in Cities VII. and VIII. is very important; it proves that their dates cannot be far from 500 and 400 B.C. respectively. Below City VI. not a scrap of this ware occurred.

The older Greek ware (see p. 87) does not help us much. The evidence is confirmative, however, as far as it goes. The bowls, massive loop handles, and broad-brimmed lamps are found in Greek colonies in Egypt in the sixth and seventh centuries. We find them at Tell el Hesy at the levels of those dates, but also higher and lower as they occur in Cities V. to VIII. inclusive.

We may now run through the cities in order, at the risk of some repetition, and assign to each the date suggested by the above discussion of the finds.

*City Sub I.*, 1700 + B.C. We have seen that City II. may be dated about 1500 B.C. How much earlier was City Sub I. it is impossible to say; the only hint is furnished by the fortifications, which may have been built to resist the great conquerors of the eighteenth Egyptian dynasty, beginning with Thothmes I.; it is possible, however, that they may have been built earlier as a protection against local foes. Hence we append the sign + to the suggestion

of 1700 B.C. Fortunately, the styles of bronze weapons and of pottery are so marked that we may hope in later excavations, when the same styles are found associated with objects of a known period, to establish a definite date for them.

*City I.* is of course later; we may assume it to be 1600 B.C.

*City Sub II.*, about 1550 B.C.

*City II.* we have dated at 1500 B.C., as from the nature of accumulation it could not have been much earlier than *City III.*, which is dated by the tablet and eighteenth-dynasty scarabs at about 1450 B.C.

*City Sub IV.* shows similar remains, and cannot be much later, say 1400 B.C. Phœnician pottery here begins to be at its best.

*City IV.* also has eighteenth-dynasty scarabs, with a nineteenth-dynasty scarab towards the top; near this latter was a cylinder with twenty-second-dynasty glazing, and a Phœnician inscription of about 1100 to 1000 B.C. Phœnician pottery in full swing. We date the base 1300 B.C.

*City V.* showed few characteristic remains; it is dated by the objects found below and above it at about 1000 B.C. Phœnician pottery scarce.

*City VI.* The date of its base is inferred from an inscription to be about 800 B.C. The great depth of accumulation over its walls leads us to infer a long period.

*Cities VII. and VIII.* The prevalence of polished Greek ware in City VII. suggests 500 as the date of its base; and the continuance of the same in City VIII. suggests 400 as the date of its building, while the notable absence of coins and other later objects seems conclusive that it did not extend down to Seleucidan times.

The objects from which we have inferred this tentative chronology are, I know, few, but it is noteworthy that the dates suggested by them form a system that is consistent; except in the cases of the jar-handle of Amenhotep II., and of the fragment of Greek pottery with the red figure on black, we have not been obliged to infer a shifting of objects from one level to another, and we have a gradual progression up through the tell from the more ancient to the more modern, from the eighteenth to the fifth centuries B.C.

I regret that my investigations have thrown no new light on the identification of Tell el Hesy with Lachish. Should an inspection of the original tablet—thus far studied only from casts—show that the letter was addressed to Zimridi, the Governor of Lachish, instead of merely mentioning him, the probability of the identification would be greatly strengthened.

Tell el Nejileh, three and a half miles to the south of Tell el Hesy, corresponds equally well with the

latter to the Eusebius-Jerome account in the 'Onomasticon' of the position of Lachish. Moreover, they speak of it as 'now a village.' This should make us cautious, for we find no remains at Tell el Hesy later than the fifth or fourth century B.C. I may mention, however, the Roman remains a half-mile away, which may once have been this village of the fourth century A.D. Dr. Petrie's survey of the outside of the mound of Tell el Nejileh, which he took for Eglon, led him to think it was deserted before Tell el Hesy, but until the spade has been put in I cannot feel sure of this point.

The arguments based on the modern names do not appear to me conclusive. The chief Sheikh of the Jubarat, the Arabs of the district, said to me: 'Tell el Hesy is merely a name. We attach no meaning to it.'

In the name-lists of the 'Survey of Western Palestine' it is translated, 'The mound of the water collecting in sandy soil.' I should translate it 'the mound of the pebbles;' at any rate, the *el* is now used as an article. Major Conder sees in 'el Hesy' the radicals לכיש, with the כ changed to ח. Such 'false etymologies' as implied in this view of the *el* occur in all languages, but we should be cautious in assuming them. At any rate, I cannot see in this more than a suggestion.

Dr. Petrie thinks that after the Captivity the Jews

were not strong enough to recapture the old site of Lachish, and settled three miles away at the place now called Umm Lakis (Arabic: 'mother of itch'), in which he would find the 'village' of Jerome. He sees in the name a reminiscence of Lachish—'Her mother was Lachish.' The name is pronounced Laggis by the peasants, showing that the letter is ק. We have no right to dogmatize about phonetic changes, denying that such and such a change *can be*, but, to say the least, the change from כ to ק is unusual. Moreover, if a village were named after the parent town, we would expect it to be called 'the daughter of ——.' To be sure, in the district of Umm Lakis to-day, 'Abu Selim' means 'his father is Selim'; whereas in all other parts of Syria where I have noticed the point it means 'the father of Selim'; but if we are to quote the Arabic usage in support of the Hebrew, we have an overwhelming number of cases where Abu So-and-so, Umm So-and-so, mean *the father of*, *the mother of*, *the place of So-and-so*. I know of no case of a city in Arabic where 'Umm So-and-so' has not such a meaning, and the cases where it has are numerous. The identification by Major Conder of Umm Lakis with the Malagues of the Crusaders does not clear up the origin of the word, as Malagues would be a natural Frankish transliteration of Umm Lakis.

However, I quite follow Petrie in his argument for

identifying Tell el Hesy and Tell el Nejileh with Lachish and Eglon on the ground of position and importance. I would put the matter thus: Lachish and Eglon were two important cities, apparently not far from each other, as it is a fair inference from Josh. x. 34, 35 that they were within very easy marching distance: 'And from Lachish Joshua passed unto Eglon, and all Israel with him, and encamped against it, and fought against it, and took it in that day.' The knowledge of their exact situation has been lost, though they were undoubtedly in the Shephelah. Here in the Shephelah we have two mounds within three and a half miles of each other, until recently unnoticed, commanding the only springs of the region, containing the most important city remains of the whole district, and of undoubted antiquity. If these two important mounds are not these two important cities, what are they? If these two important cities are not to be found at these two important mounds, where are we to look for them? The argument, though not scientifically conclusive, is highly suggestive! Perhaps an application of the spade to Tell el Nejileh will help to enlighten us as to whether it be Eglon or Lachish or something else.

The uncertainty, however, regarding the exact identification of Tell el Hesy is, to my mind, a matter of little importance in comparison with the

undoubted facts which the excavations have brought to light. Whatever its name, the place was a stronghold of the Canaanites long before the Hebrews had left Egypt. Lying, as it did, almost directly in the line of march northward, it was in the path of the eighteenth-dynasty conquerors, and perhaps the destruction of the tower in City I. was due to an attack of Thothmes I. One of its cities undoubtedly fell a prey to Joshua; the reader may choose City III. if he holds to the old chronology which places the Israelitish conquest in 1451 B.C.; or, if he follow the later fashion of placing the Exodus under Menepthah, he may ascribe the razing of the large building in City IV. to the fierce attack of the Hebrews. We may further assume that either City IV. or V. saw the glory of the kingdom of Judah, while Cities VI. and VIII. were contemporaneous with the decay of power, the overthrow, the Captivity and the return.

## CHAPTER VII.

### SKETCH OF THE EXPEDITION.

IN the autumn of 1890, while staying in a lofty village of the Lebanon, I was asked to carry on the excavations begun at Tell el Hesy by Dr. Petrie. As work in Palestine could not properly be commenced before early spring, I spent the month of January in a short apprenticeship to that most energetic of excavators, at the pyramid of Meydûn about forty miles south of Cairo. He was at once my inspiration and my despair; for his cordial patience in instructing my inexperience in the varied details of a digger's work was unfailing, while his easy mastery of them all suggested a comparison in my own mind far from encouraging.

I learned that the life of an excavator is not monotonous. In one day he would be tracing out mud-brick walls buried in sand and rubbish; removing great stones which blocked up a passage; plotting in his note-book some tombs; copying in

colours a mural painting; taking photographs; marking out new trenches for his workmen; and penetrating to the heart of the pyramid to visit the man who, by the light of two candles, was clearing out the central chamber. He went over with me the chief points relating to the work at Tell el Hesy, even to the names and varying capacities of the workpeople. Towards the end of my stay his book on Lachish arrived, and I retired with it for two days into the sculptured tomb of Ra-Hotep, which furnished an atmosphere both artistic and serious, as befitted such archæological studies.

On February 16th I landed in Jaffa, where I spent a wearisome five days arranging with a German carpenter of slow mental processes for the construction of a little tram-line and eight trucks. On arriving in Jerusalem I arranged with his Excellency Ibrahim Pasha for the services of an inspector of the excavations, required by the Turkish law, to take charge of the finds for the Imperial Museum at Constantinople. I was fortunate in securing Ibrahim Effendi, of the noble family of the Khaldi, which rightfully glories in its descent from the great Moslem conqueror, Khaled. I found in him a faithful and honest official, as well as an intelligent and diverting companion. His stock of anecdotes is singularly rich, and he is a capital raconteur. A philosopher in his way, his reminiscences, covering

the visits of the emperors, kings, and great generals who have visited Jerusalem during the last thirty years, would make an entertaining volume.

Violent storms detained us in Jerusalem till our patience was nearly exhausted, but on March 5th we travelled to Ramleh. Since then I have easily ridden from Ramleh to Tell el Hesy in seven hours, but our first journey took us all day, as we had to hunt for the best places to cross the rain-swollen ditches. Towards sunset, approaching from the north-west, I had my first sight of the place that was to be my home for a good part of two years. About us was a world of rolling green, broken only by the watercourses where the soil showed a rich bed; hardly a tree was to be seen; far away to the east stretched the pale-blue line of the rocky Judæan hills; below us wound the Wâdy el Hesy, and rising steeply above it was the tell, with its rounded top, curiously marked by the trenches of Dr. Petrie. We pitched our tents where the land rises towards the crests and ridges to the south-west of the tell, on a gentle slope starred with the glowing scarlet anemone. Not a house was in sight, only a few distant barns which the Bedawîn build for their cattle and peasant-partners, disdaining to sleep in them even in the wildest weather; lines of their black tents stretched along the hollows here and there, and at night we heard the sounds of

merry chanting, the barking of dogs, and the occasional report of a revolver. The west wind brought to our ears the boom of the sea fourteen miles away.

Though we seemed to be so alone in the wilderness the news of our arrival spread, and the very next morning peasants from Bureir (six miles off) appeared, asking to be 'written down' as workmen. They were much impressed by my note-book, with its lists borrowed from Petrie. 'Wullah, they know everything,' was the murmur of the bystanders when, after inquiring a certain man's name, I told him that we had no work for the lazy and the insolent.

Owing to the rain, we did not break ground till March 16th, but meanwhile I spent my time at the tell identifying Petrie's walls and other discoveries. We began in the 'west city' with seventeen men, each with a woman or girl to remove the earth in baskets. An easy time the women had during the first week, as the men were working in trial trenches which were afterwards refilled, so that the earth had merely to be tossed on one side. But the poor women's turn came when we began work on the tell. As I have noticed before, we worked in a plot of ground at the north-east quarter, divided into about 100 squares of 10 feet, and the girls who were in the inner squares had long and swift walks to the edge of the tell, over which they tossed the

earth from their baskets. One was at first rather nervous to see the girls so fearlessly approach the steep edge, putting so much force into the throwing. Indeed, one day a girl lost her footing and slid rapidly 100 feet to the bed of the stream, but she took it as a good joke. We were obliged to assign two girls, and sometimes three, to each man, and even then the men, now increased to thirty, were far from over-worked. The tram-line did not pay, as the area of work was so small. We would first lay it in a trench, but the land about it would become so quickly lowered below the level of the rails that in a few days it had to be shifted and relaid. This took some time. However, when it actually was working it certainly hurried on the excavations.

One day I was counting the number of baskets a certain girl emptied into the truck. Noticing my attention, she began to work faster; soon other girls caught the idea and redoubled their work; the men, stimulated by the girls, dug fast and furious; Abdullah, who managed the tram, stood by his truck shouting and gesticulating like a London omnibus conductor, and soon the whole place was in a perfect whirlwind of work; the most sluggish caught the wild infection, laughter resounded on every side, and in a quarter of an hour certainly over an hour's work was done. The

effect of the fun lasted all day in increased good-nature.

We began the work either at sunrise or a half-hour after, and, with an interval for lunch, went on till within an hour and a half of sunset. The women had six miles to walk from Bureir before sunrise, and six miles back at the close of the day, when they had to draw water, grind corn, and bake bread, so that it seemed only just to let them off before sunset.

That first season the weather was most delightful, with bracing nights, temperate days, and few fierce winds. The party kept in fine health and spirits. When I closed the works on May 15th it was not because of the weather, but from the lack of men, who left for the wheat harvest; the best of them had gone three weeks before to reap the barley, and the last day we had a small and sorry set of labourers, old men and young children, the maimed and the incompetent. If I could have kept a full force, the work could have gone on quite comfortably for a month later.

So we moved our camp on camels into Gaza, where we stored our tents and tram at the premises of the Church Missionary Society, with the permission of the Rev. R. Elliott, M.D., who with all his fellow-workers showed us unfailing kindness.

Early in October we were on the ground again.

Very different appeared the country about Tell el Hesy in the autumn. The green and red of the fields had faded into a dull monochrome of brown. No merry sounds reached our camp, for the Arabs, fearing the deadly malaria which hung over the stagnant water below the tell, had withdrawn far away. Only at noon large herds of melancholy cows were driven to the wells in the stream-bed for their daily drink, to be driven away again on a hopeless search for nourishment from the barren fields. The work-people were dull and listless, and one after another would fall ill during the hours of work. Out of our small camp of nine, I was the only one to escape fever; the Effendi fell sick, my cook had to be sent to the Gaza Hospital, my foreman was laid up several times, and the four guards were always giving out. It was a most sober season, and as the days grew shorter and colder the amount of work done grew less and less. One morning the girls threatened to strike. My opinion was that the men had put them up to it in hopes of getting a rise of wages themselves. I announced that I was going to dig that day, and that any girl who wished to basket after me might follow. They rose in a body, and the strike was averted. We really paid very good wages, about ninepence a day to the men and fivepence to the women, raising the rates during the harvest as high as fifteenpence and

eightpence. In December the winter storms began in good earnest, and we broke camp in time to spend Christmas in Gaza.

During the next spring season the view from our camp was one of varying beauty. The fields between our tents and the tell were planted with barley, while the tell itself was covered with a crop of lentils. As the season advanced the golden barley, stretching up to the red and yellow of the lentils in the tell, made a rich foreground against the distant fields, still green with the tardier wheat. The rains continued much later than the year before. Early on the morning of the 23rd of April I was awakened by the sharp falling of rain on the tent. We hardly expected the workmen, but they appeared and went off to the excavations. More rain fell, however, and heavier, the wind rose, and as I was taking my coffee I saw the men and women flying from the tell. I directed the men to take shelter in the guards' tent and the women in another tent that stood empty. But far from empty was this small ten-rope tent when sixty men and girls had packed themselves in it sardine-fashion, overflowing at the door.

Yusif came to my tent to make the wages accounts, for it became plain that no more work could be done that Saturday. Hardly had I opened my note-book, when down crashed the tent over

our heads, I escaping by the door, and Yusif still left within. The sudden gale which had threatened the destruction of all my breakfast dishes had also overturned the Effendi's tent, and the tent in which the girls had taken refuge. With an absurd mingling of amusement and apprehension, I saw the poor creatures swarming, creeping, crawling out of the débris of the tent, falling over each other, laughing, crying, and finally running about like chickens terrified by the appearance of a hawk. Fortunately no one was injured, and the only thing broken was my balance, while one gramme weight was lost.

In May we were much troubled by the siroccos. By this time the earth we had thrown down formed great slopes at the north and east. When the wind blew from these quarters it raised great clouds of dust; add to this the earth cast over the edge every minute by fifty or sixty girls, and then gather an idea of the blinding, suffocating condition under which our explorations were conducted. From these winds there was no escape. At night the flapping of the tent canvas was almost unbearable, and when the wind fell the relief was exquisite.

On a clear, cool day, however, the life of an excavator is enviable. To rise before the dawn breaks over the great, still world; to precede the long picturesque line of workpeople to the tell; to

follow from hour to hour the unearthing of a room; to see the handle of a pretty vase peeping out of the earth, and to watch it brought out whole; to make the tour of the men towards the close of the day, marking the finds which should be brought to the tent; to blow the final whistle which releases the people, who plunge down the hill as eagerly as children run from school; to return to the tent for a cup of tea (blessed drink in the wilderness!), and for a quiet examination of the day's finds, and then to take a glorious gallop on one's Arab colt, perhaps to meet the Gaza messenger who brings the precious post—these are joys as genuine as they are simple.

The reward of this season came towards its close, when the cuneiform tablet was released from its imprisonment of 3300 years. Suleiman, who found it, called it a 'saboony'—that is, a bit of soap. The men were told to look sharp after more of the same brand.

Hardly had I arrived at my home in Beirût in early June, when I was taken with typhoid fever. The time of convalescence was spent in the lofty Lebanon. During the greater part of August our tents were pitched at a height of 6,400 feet above the blue plain of the sea, in the ancient grove of The Cedars, where at sunset the wondrous Syrian light made burning paths of red between the black

shadows stamped on the slopes and knolls. About the middle of September I was back again in Jaffa, and on the 24th we were encamped in Philistia for our last season's work.

Remembering the discomfort and danger of a proximity to the Wâdy el Hesy in the poisonous autumn, we camped three miles to the west, on a rise of ground with deep hollows behind our tents. Fortunately, it was not a malarial season. The daily rides to the tell gave a pleasant variety. I was still very weak, and could not spend a large part of each day at the tell, as formerly; but owing to the efficiency and faithfulness of my foreman Yusif, a native of the Lebanon, the instructions given in the course of my daily visit or two were completely carried out. He took an intelligent interest in the historical results of the work, and he was to be trusted to follow the stratification correctly. He managed the labourers with skill and firmness, and they vied for the honour of entertaining him when he visited Bureir.

The heavy rains came early, so the ploughing began by November 7th. I retained all the good workmen needed by raising the wages 30 per cent. However, we got about 30 per cent. more work out of each man, for the women do not plough, and such quantities flocked in to take advantage of the rise in wages, that the men had to work much

faster to keep up with the increased basketers. Towards the end of the month matters began to look rather serious. I felt that the lowest city must be thoroughly examined, even if we had to sit out the storms, waiting for a chance fine day.

Between the tell and our tents was the Wâdy el Hesy, about 15 feet deep and 20 feet broad where we crossed it. I have known it to be dry one hour, with a raging torrent overflowing its banks three hours after. One day, when the clouds grew black at three o'clock, the girls began to look anxiously at each other; presently one screamed, 'The flood! the flood!' and looking down, we saw that the torrent from the mountains had reached the foot of the tell. There was a straight cut to our crossing, which was about a mile away, the twisting stream-bed taking quite twice the length. So I blew the whistle, and watched from my colt's back a somewhat exciting race; the girls flung themselves down the tell and darted across the fields, their white veils flying behind them, while the men scuttled along on their tiny donkeys; of course the torrent was heavily handicapped, having to follow the sinuous course of the bed, but it had the advantage of momentum; the girls won, and when I galloped up, I found them panting up the opposite bank, hysterical and triumphant. I was quite as relieved

as they, for the responsibility of providing bread and shelter in an open wilderness for sixty girls had not been anticipated in my instructions.

We experienced one awful storm, when the rain was almost unceasing for three days and nights. The Effendi's tent and my own were new, and we kept dry; but I was obliged to give shelter to Yusif and my young cook, who were drowned out of their tent. However, a spell of fine weather succeeded, during which we watched the sky hourly, and on Saturday, December 17th, we were safe in Gaza, our task completed. On the Monday previous, the field of excavations had presented a most irregular appearance, pits here, elevations there, piles of earth in every direction; but on Friday, when we left the tell, the area of work was a sloping field, so neatly levelled that I believe it was ploughed and sown the very next day. Sheltered by cliffs of our own making at the south and west, it will furnish, so the Fellahîn say, an admirable place for growing tobacco.

So ended the last siege of Lachish; perhaps the longest, certainly the most systematic, it ever endured. Our advantage over Thothmes, Sennacherib, and the other conquerors is that, whereas they took but one city apiece, we reduced and captured eleven cities. Their spoil was greater than ours; in fact, we felt a personal grudge

against them, as well as against the inhabitants, for deliberately leaving so few traces. But certainly we can affirm that our army had a distinct character, in being made up so largely of women.

## CHAPTER VIII.

### THE ARABS AND THE FELLAHIN.

If physiognomy is any guide, our Tell el Hesy neighbours showed that they belonged to two races, or, to speak more accurately, to two distinct branches of the same race. The thin lips, straight nose, and oval face of the Arabs are in clear contrast with the coarser features of the Fellahîn. As I have said elsewhere, the ethnic studies of Syria have not as yet been pursued far enough to justify many positive statements, but it seems clear that the Fellahîn of South-Western Palestine, where the Hebrew conquest was never complete, show as unmixed a descent from the pre-Israelitish inhabitants as can be found in the country. The Arabs occupied the district to the west of the Judæan hills at comparatively recent date. The dialects of the two differ to some extent, while the difference of enunciation is still more marked, the Arabs having an abrupt and clear-cut manner of speech. A fine, free



GROUP OF FELLAHIN.



carriage, an air of independence, an offishness when they feel you a stranger, and a rare sweetness when they find you a friend, are characteristic of the Bedawîn. One day I was imitating before my young Bedawy friend Jema'an his pompous stride; he did not like it at first, but when I illustrated the contrast between it and the walk and bearing of the uncouth Fellah, he was delighted, and begged for a repetition whenever I saw him. There is a mutual contempt between the Arabs and Fellahîn, curiously tempered with fear on the part of the latter.

When the group of white tents first appeared near the tell, at the time of Petrie's expedition, the Arab Sheikhs flocked to the camp in the hope of bakhsheesh. Here the advantage of the presence of Ibrahim Effendi was felt, and the Arabs, seeing that the work was under Government direction, finally withdrew their demands. By the time I had been there a season or two, we were quite recognized as an established institution. As a precaution, we usually had four guards to watch all night, but I got to feel as safe as in my own house in Beirût. I used to ride to Gaza and Jaffa quite alone, and often unarmed. The district, often an unsettled one, owes its security to the honest administration of Ibrahim Pasha, the Governor of Jerusalem, who was always most kind to our work. One of our tents was robbed during the week of our first arrival,

before the camp was properly organized, but we immediately sent for Harb, the chief Sheikh. He accepted the responsibility, set inquiries afoot, and finally, when the thief was not discovered, offered to levy a tax on the whole tribe, and thus make us compensation; but seeing that we had made an impression, we dropped the matter. The Sheikhs would probably have taxed the people for twice the amount, and have pocketed the balance. While searching for the thief, they decided to gather all the sinners of the tribe to the shrine of the Faluji, a wely near by, and to make them swear to their innocence; the one swearing falsely would spit blood. The assembly took place, but, as the tale of sinners was incomplete, the ceremony did not come off. One evil-looking man had been arrested on suspicion, and the attempts used to make him confess were farcically amusing. Threats having failed, this sort of argument was employed: 'Perhaps you are innocent, and we will give you a chance to prove it. Rise and search the ravines about where treasure may have been hid, and if you are innocent God will guide you. If you don't find the treasure, we will know that you are guilty and persist in concealing it. Put your faith in God, and hunt.'

Harb was a good friend to us, and often came for a visit. When he found that the owners of the tell

had received money from us (in compensation for damage to crops) he began to hint that he wished a present—a cloak, a pair of boots, and a silk scarf being his modest demand. I blandly asked him to show where his land had suffered by our digging, adding that we gave no presents, only paid just dues. He kept renewing his hints from season to season, but we were able to turn the tables on him. One day during our last stay, two Arab lads, one of them a near relation of Harb's, were loafing about the tell, staring at the girls and making rude remarks. During the noon recess they wantonly shot a dog belonging to a stout digger. Down rushed a hundred angry people from the tell, and down rushed Yusif after them, and it was entirely owing to his authority that a serious row was averted. We sent for Harb, and he soon appeared. Though the tents of the tribe are scattered over a large territory, it seemed always to be known where any given man might be found. We would send a guard out into the wilderness, apparently so vast and empty, and he would presently return with the person required. We seemed to live in the midst of a complex, invisible society. It was uncanny.

After extolling our own mercy in not sending the lads under guard to the Gaza governor, we demanded from Harb a dollar as recompense to the owner of the dog; and after a day or two we

actually did extract a dollar from him, though I never saw anything come so hard as his purse from his pocket, except the money from his purse, and then he carefully avoided taking out the agreed-upon dollar, but produced a half-napoleon and asked for change, which I cheerfully and promptly furnished, much to his chagrined surprise. The subject of the cloak, the silk scarf, and the pair of boots never came up again; but the story of how the Khowaja got a dollar out of Sheikh Harb took its place in the local folk-lore.

We naturally saw much of the owners of the tell, Abu Smada and his three sons. The father is a decrepit old man with unabated powers of intrigue. The first day after my arrival, when I was examining the tell, I found that a certain young Arab was following me about, and I inquired his name. After some hesitation he said 'Hussein,' and that he was the owner of the land. 'But,' I said, 'you told the other Khowaja your name was Nasûr; how is that?' The young man looked foolish: 'Yes; I told him that because I was afraid to let him write down my real name.'

When Hussein and his brothers found that we did not only the right but the generous thing by them, they grew very friendly. Twice we paid them a high price for crops which we destroyed, besides giving them a showy pistol. Indeed, we really en-

larged the area of their arable land at the tell, for although to the north the earth thrown down had encroached on the field below, so that the gain above was but slight, yet we had made ground for them at the east, where we had stolen from the river-bed below an area over 150 feet long and 20 feet broad. Another gain of 20 feet arose, of course from the broadening of the hill as we descended.

One of the reasons for the great expense of the work at Tell el Hesy has been the necessity of leaving the ground fit for ploughing. At first the height above the river and the field was so great that our earth did not trouble us; but as the slope of earth we had thrown down thickened in breadth and lost in height, the difficulty greatly increased, until during the last season we had to rehandle the top layers of our slope several times. But I feel sure this was a cheaper way than buying up the land. For we arranged matters quietly and directly with the Bedawy, buying out his crops, whereas the purchase of the land would have involved the machinery of title-deed, fees to appraisers, fees to officials, delay, no end of anxiety, and finally an exorbitant price.

The negotiations, however, were tedious. In the spring of 1892 we found a crop of lentils on the tell, and barley all about it. I made a liberal estimate of

the value of the crops in the actual place of excavation and made allowance for the damage to crops in the paths we would have to make for the labourers. I told Yusif to offer the Bedawy Hussein three napoleons, and, if necessary, to advance to four. I knew the preliminaries would take some time, and retired to my tent to watch the battle from afar. In a shorter time than I had expected, Yusif appeared with Hussein saying that they had inspected the tell, and that he had agreed to accept three napoleons. I said to Hussein: 'Does your father agree?' 'He does,' he replied. So the money was handed over, and I was congratulating myself that the last interruption to the work had been removed, when the farcical drama really began. For, lifting up my eyes to the door of the tent, I beheld the patriarch striding over the fields, firmly grasping his stout staff. Was this the feeble old man we had never taken into account, and who usually seemed too weak to crawl along? He entered, and I knew mischief was brewing. Hussein handed him the money. He looked at it, laid it on the table, and then delivered himself of a masterly speech, which I wish I could reproduce. He repudiated the money—he wished to know our rights to work on his land—he grew stormier and stormier. Meanwhile Hussein, with as masterly an appearance of disgust, reproached his father for stultifying him in this manner before the Khowaja.

Washing his hands of the whole matter, he made a dramatic exit, and the old gentleman rushed off in the other direction. The money remained on the table. I saw in the affair merely a trick to get another napoleon out of us, and told Yusif to manage it as well as he could, for delay to the work could not be allowed. Then followed various colloquies: Yusif and Hussein; Hussein and his wicked old father; Hussein, Yusif, and the old man; and finally they all reappeared with a paper having the old man's seal, and declaring that he would be entirely satisfied with four napoleons. So ended the negotiations; but to this hour I cannot tell whether Hussein was in the game or not. If so, then he is a most accomplished actor. About the old gentleman there can be no doubt. After his temporary robustness he subsided into his usual feebleness for a couple of months, when he had another revival of strength, and started off with the pilgrimage to Mecca, taking with him wheat, cheese, lentils, and twenty napoleons as provision for the journey. We never expected to see him again, but he turned up as the Haj Selman in the autumn, a sanctified anomaly, as decrepit and hardy as ever. 'He's a root, a root,' said Sheikh Salami to me with a grim smile; 'nothing will kill him.'

When the rains began during our last season, an Arab tribe of some thirty tents moved into the

depression just back of our camp. At first I was somewhat dismayed at the complications suggested by this close proximity, but after a day or two of trial I was delighted to find that our new neighbours were a social addition. For almost two months we lived side by side in great friendliness. I knew that I should get on with the Sheikh, but I feared a quarrel among 'the herdsmen of Abraham and the herdsmen of Lot,' which, however, never took place. Sheikh Selman is a man under five-and-twenty, with the long Arab face, and of a gentle, almost melancholy address. He has the instincts of a gentleman, and was always sensitive lest he should be trespassing on my time. One had to be rather careful with him, as his feelings were delicate and his pride immense. His duties as Sheikh seemed to be to preside in the 'guest-house,' which was a part of his large tent, and to act as judge in disputes, for a fee. Many a restful half-hour I spent in the circle about the evening fire in the guest-room. About twenty men and lads sat or reclined about the fire, which was fed with twigs or thorns by the old man of the camp. Now it died away, leaving the tent dim; now it leapt up, throwing a rich red light on the strong, swarthy faces. From outside came the bleating of sheep and the low roar of the handmill where the women were preparing supper. Making coffee is considered a masculine art. Freshness is ensured, for every

time coffee is taken the berries are roasted, pounded and ground with a huge rounded staff in an earthen dish, and then poured into a quaint pot standing in the embers. A pinch of salt in the coffee gives it the final finish. At times the conversation was lively; but these Arabs are not afraid of silence, and it was agreeable to sit quiet if one did not feel like talking.

I was present at one of the judicial processes, and it was interesting to notice the dignity investing the simple affair. No one altered his position as the guest-room was changed to a court. The litigants handed their weapons over to Selman as a pledge for his fee, and then each party had his say, sitting and smoking quite informally. The defendant was accused of having torn his wife's head-dress off in a rage, and the accuser was her relative, to whom she had fled after this disgrace. Selman found for the lady, and I went bail for the defendant to the extent of half a crown, which he was to pay to his wife next day, when the reconciliation was to take place. The custom obtains, when fees or damages are to be paid, to name a large sum, say 100 piastres. This is agreed upon; but at the next camp-fire one man will turn to the judge or to the party claiming damages, and say, 'For my sake remit 10 piastres,' and the next, 'For my sake remit 15 piastres,' and so on, till the sum is reduced to reasonable limits.

One member of the camp was a poet and an *improvisatore.* He brought me one day a paper scrawled over in Arabic, which he said I had dropped. Accordingly I tore it up, whereon he confessed that it was a poem he had composed in my honour (written for him, probably), requesting information as to the purpose of our digging. I got him to repeat it to me, and it had a fine, rhythmical swing. Our work was a source of wonder to the Arabs. They were satisfied that we took nothing of apparent value out of the tell, and formed their theories based on the universal belief that our crusading ancestors buried treasures and left us the clue.

As I was riding towards Tell el Nejileh one evening, I stopped to chat with a couple of Arabs. Said one: 'Don't bewitch the tell.' 'What do you mean?' 'Oh, we know what you do. You come to a tell that is full of gold and treasure, and bewitch these into the form of potsherds. Then you dig out the potsherds, take them to your country, undo the spell, and they turn back to gold and treasure.' Said I: 'Shall I tell you the real reason why I dig? Is it not possible for a man to go to Mecca as a pilgrim for few pounds; but will not a man spend a hundred on a pilgrimage, with everything fine and grand, all for the sake of religion? Now, you know this is the Holy Land. Abraham, Isaac, Jacob,

David, and Solomon lived here, and it is a matter of religion to come and unearth their towns and find out how they lived, and what they did, if we can. Now, I don't expect you to believe me, but I am telling you the truth when I say that the purpose of the digging is not treasure, but one of religion.' 'Wullah, we believe you,' said the man; 'but what about the bewitched pottery?' This left us where we began, and I rode off.

The month of Ramadan is kept strictly by the Arabs. The last day of the fast the fields about the tell were gay with Bedawin merrymakers. The women had cast away their sombre garb of indigo, replacing it with dresses and veils of crimson silk, with long, flowing sleeves. A girl would stand on the shoulders of a woman, who would grasp her ankles and execute a slow, circling dance, the girl standing perfectly straight. Men and boys dashed about on horses, firing pistols to encourage the women. At sunset the bachelors of the tribe gave a dinner to the maidens in the bed of the stream. I was invited to the feast, but a look into the pot was enough, for I recognised therein every part of a sheep's anatomy in one unhappy *mêlée.* While the pot was boiling I was asked to assist in the accounts, as the bachelors were somewhat anxious to know the amount each one had to pay. My pompous little friend Jema'an was there. I asked him if he

was going to show me his bride, for on this feast occasion the women were closely veiled. A fierce young fellow stepped up and declared that it was none of Jema'an's business, and I should not see her. Jema'an explained to me later that on the first feast day after the wedding the bride reverts to her relatives, and for that day the husband has no control over her.

Marriages take place between the daughters of a certain noble house in Gaza and of a certain noble division of the Arabs, both of the family of the Prophet. I understand that the bride remains at her father's city house, rearing her sons till they are about twelve years old, when they join their father's tribe.

Our opportunities for observing the Fellahîn were ample, as in the course of our work we must have employed nearly 400 different individuals. By a sifting process we learned to know the intelligent and faithful, and after the first season we were not troubled with incompetence and laziness. There was a curious change in the manner of the girls after the work of the day began. They often came half an hour early, and would sit huddled together apart from the men, covering their faces and acting very shy if I approached; but once at work, all reserve vanished; they threw back their veils, showing the tires of large silver coins about the face,



VIEW OF THE EXCAVATIONS.
*(From a photograph.)*

and would laugh and joke with the men with perfect freedom.

At first the multitude of strange faces was bewildering, but soon I began to recognise among them as marked traces of individuality as are found among the civilized. There was Sheikh Salim, a dear old gentleman, with a worn face, sweet and gentle, a patient and conscientious workman, who never needed to be watched. His only failing was a pardonable partiality to his little son Yûsif, who carried away the earth and was fond of play. As Sheikh Salim toiled in his deep trench, who would recognise in this homely, quiet old man the wild figure seen at sunset dancing up to the grave of a holy man near the camp, shouting out guttural sentences, braying like a donkey, uttering the mingled roar and growl of an angry camel, then suddenly turning and darting off across country, to be brought back, swaying like a drunken man and almost as unconscious, by the young men who had rushed after him? It was whispered that this holy workman of ours would have kept on till he reached Mecca if he had not been stopped, and that he did make nocturnal visits to the sacred city, being transported through the air!

Later his son Yusif was sent to the Azhar mosque at Cairo, where I visited him on my way to England, finding another of my lads there as well. Quite a

different character was the young Sheikh Mohammed. His title was a recognition that he could read and write; in fact, he was an embryo theological student, and wore a white turban. His somewhat sanctimonious manner and generally meritorious air rather antagonized me at first, but he turned out to be a nice and simple lad enough. He brought to work with him a woebegone old lady, his mother, in fact, who always spoke of him with pride as 'the Sheikh.' She used to sit at my tent-door in the evening (she was too feeble to walk to Bureir) and drink a comforting and friendly cup of chocolate, groaning out her dismal thanks. When, in obedience to my conscience, I finally dismissed her, she exhibited an unexpected degree of spirit, and departed in high dudgeon.

Then there was Rahuma, our messenger to Gaza, a rather fussy man, with eyes of the poorest quality, which, however, never let the smallest object escape them. His daughter, Fatmy, at first worked with her brother Monsûr rather than with her father. It was a delicate arrangement, owing to the fact that Henda, Monsûr's sweetheart, wasn't allowed to work with him, but could help her prospective father-in-law. Henda settled down into a capital worker, though a bolder, wilder girl I never saw. Tall, straight, active, she made a picturesque figure in her slim blue gown with stripes of figured crimson,

and her fringed white veil, as she darted, sickle in hand, from trench to trench, cutting down the rich barley before each digger. I was relieved to see the strength of will shown by Monsûr in rigidly keeping Ramadan, for he is a gentle youth, and I had feared that his prospects for matrimonial control over Henda were very frail. Suggesting this to him one day, I was answered with a smile of mingled scorn and amusement that was very reassuring.

When we returned in the following spring we found that the marriage had taken place, but our coming was the unfortunate occasion of discord. Henda refused to work, and after a brief but stormy quarrel went back to her people. This led to a singular complication. Wives are an expensive luxury in Southern Palestine, costing sometimes as high as £50. A lad's sister is a valuable piece of property, as he can exchange her for a bride. Monsûr had traded for Henda by marrying his sister Fatmy to Henda's uncle, Rizq. Rizq and Fatmy proved a happy couple, but when Henda ran home poor Rizq had to lose his bride. Her hostage having failed, she returned to her old home to bake and draw water. Admirable business, but indifferent romance. So Henda, who had basketed earth for Monsûr before the brawl, worked after her uncle Rizq, within a few paces of her estranged husband; while Fatmy, with easily imaginable rebellion in her

heart, filled her basket with the earth dug up by her brother Monsûr. But she said never a word nor cast a look at Rizq.

'She has been well brought up,' said her brother proudly. 'The trouble with Henda is that she has had no one to beat her'—a thing a girl must get used to in her youth, as Monsûr found to his cost when he tried to supplement the imperfections of her early training.

Monsûr was talking of a divorce (for the separation was thus far tentative), when the inevitable middleman stepped in—the peacemaker, the reconciler; the heads of the family met to partake of a sheep slain for the occasion, and the original *status quo* was restored. This functionary plays a most important part in the East. The protagonist of one quarrel may be the peacemaker of the next. Indeed, I sometimes suspect that the parties do not care to come actually to blows until they see the peacemaker advancing around the corner!

I adopted Petrie's plan of giving bakhsheesh for all the finds, varying with their apparent importance. This plan took the place of a sieve, as the men could not afford to miss the chance of adding a third to their day's wages by finding a tiny [scarab. The total bakhsheesh for the four seasons was under ten pounds, a small price to pay for the assurance that nothing was secretly carried off. The system has

one drawback; a man will sometimes bring a thing from a distance and pretend to have found it on the spot. When a man dug up a coin of Constantine's, who lived six centuries later than the time which all the other objects suggested for the top of the tell, I was much puzzled for an instant, but I soon saw that the coin had been recently worn for some time in a pocket. I indignantly refused the coin, and dismissed the man at the end of the week. The case was easier when an old fellow called me to him and delightedly pointed to an iron ring with two or three keys attached, which he swore to have found then and there. His dismissal had a salutary effect, but I think the nickname I gave him preserved the incident rather better, as the Syrians fear ridicule above all things. Whenever he returned on a fruitless quest for re-employment, I saluted him gravely as the 'Father of Keys.'

Saturday was pay-day. As change was scarce, we would lump several men's wages together, which resulted in a complication of accounts among the men, from which later on Yusif would patiently disentangle them. Sometimes there was a balance either in our favour or against us, but one halfpenny was the amount of my loss in two years. Our honest dealing was an astonishment to them, and they responded in kind. Each man received pay both for himself and for the women who carried

earth for him. But one week we had some extra girls, and I shall never forget the awful experiences of that pay-day, when we paid two or three together with a gold coin. One virago declared with a look of great meaning that she must receive her money alone. When told that this was impossible, but that she must get it with two other women, she said, 'Then I shall fight them,' with the air of one impelled by a not-to-be-resisted fate: she must fight.

When the weather was not too cold some of the men slept near the tents, digging little shallow graves, in which they lay covered with their cloaks. A few girls sometimes stayed also. For food they had hardly anything but bread, with an onion or radish for flavour. Through the long, hot days of Ramadan I let them off somewhat earlier. The majority of the men worked hard without food, water, or tobacco. The younger men were more lax. Seeing a stalwart youth eating one day, I reproached him with the title of Kafîr—that is, infidel; whereupon he serenely replied, 'Oh no. If I eat in Ramadan, I'm not an infidel; I'm only a hog!'

How eagerly they waited for the sunset gun from Gaza, the signal for breaking the fast! After supper their spirits rose, and on a moonlight night they would dance for us. They formed a row, and began

to clap in time to a rude chant with refrain, bending one knee, and throwing the body forward at intervals. The chant alternated with a fierce grunting that was weirdly rhythmical. When they had worked themselves up sufficiently, we would call for Salami, our negro guard. Sword in hand, cloak flowing from his shoulders, this hideous creature would creep up like some beast of the forest; when in front of the line he would flourish his sword, crouch before the dancers, suddenly advance upon them with a thrust of the sword, retreat, fall on his knees, sway back and forth, advance again still kneeling, sway back once more, all the time emitting terrible guttural cries.

When the harvest came, the hearts of the Fellah and Arab grew glad within them. The Arabs do little work, but their peasant-partners come out to them, and erect booths of weeds and reeds, as temporary homes, taking their share of the corn. The harvest was our great rival. Every day Arabs would ride up, trying to tempt our men away. They preferred corn to money, naïvely saying that the corn would keep, but the money would be spent, and what should they do for food next winter? A good bit of philosophy this—a calculation on their own foreseen weakness! Moreover, the idea of the harvest had a romantic hold on them (I here quote the practical Yusif; this is not a bit of sentiment on

my part), and they grudged losing a share in the gay times when the whole village turned out, the men to reap, the women to glean, and the cattle to follow up what was left.

The incidents we have related in this chapter will give an idea of some of the qualities of the Fellahîn. Our relationship with them was cordial to the end, and I think we saw them at their best. To us, who not only sympathized with them, but found them attractive, they showed faithfulness, honesty, good temper, and submission to authority. As a matter of loyalty they almost always told me the truth, although the abstract idea has not much hold on them. The worst things we noticed in them were the profanity and license of their speech, at times as grotesque as it was shocking. On the other hand, they shared the charming manners of the East.

It is a fashion to call Oriental politeness superficial, with a disapproving accent on the adjective. Since, according to the present natural law, human beings must have surfaces, I, for my part, hold it a gain to find these agreeable. The idea of an antagonism between the sincere and the suave is not a logical necessity, but rather a comforting dogma pronounced by the Occidental conscious of inner worth, who, confronted with the polished Oriental, fails to find a smoothness in his own

exterior. Granted that there is a good deal of habit in the Syrian civility, it is a habit which often is fruitful in averting quarrels; it is a habit which meets ill-temper with gentleness, makes many a small concession, is full of pleasant comradeship, and which in some points comes strangely near to the charity which a great Oriental once recommended in a letter to his friends at Corinth. I would ask all those interested in following the work done at Tell el Hesy to remember how much they owe to the loyal labour of the descendants of the old peoples whose cities we have examined.

# APPENDIX A.

Professor Sayce's copy of the cuneiform tablet found in City III.

*Copy of Cuneiform Inscription from Tell el Hesy, by Rev. A. H. Sayce.*

1.

2.

3.

4.

5

6.

7.

8.

9.

10.

11.

12

13. (?)

14.

15.

16.

17.

18. erasure

19.

20.

21.

22.

23.

24.

25.

Edge

The following is his transliteration and translation of the inscription:

1. [A-na am]ila raba ki-be-ma Ba-al (?) . .
   To the officer* say: Bal (?) . .

2. . . . . . . . . . a-bi
   . . . . . . . . . abi

* Literally, 'great man'—a term used in the Tell el Amarna tablets in the sense of 'governor.'

3. a-na sepâ-ka am-ku-ut.
at thy feet I prostrate myself.
4. lu-u ti-i-di i-nu-ma
Verily thou knowest that
5. tu-sa-tu-na D.P.* Ba-du (?) . .
have brought (?) Badu (?) . .
6. û D.P. *Z*i-im-ri-da
and *Z*imrida
7. bu-wa-ri ali û
the spoil (?) of the city, and
8. ik-ta-bi-mi
says
9. D.P. Dan-Hadad a-na D.P. *Z*i-im-ri-da
Dan-Hadad to *Z*imrida.
10. [a]-bi al Ya-ra-mi
my father: The city of Yarami
11. [is]-ta-par-mi a-na ya-a-si
has sent to me;
12. [id]-na-ni-mi
it has given me
13. III (?) GIS-KHIR û III se-du
3 (?) pieces of green wood (?) and 3 slings
14. û III nam-*z*a-ru-ta
and 3 falchions,
15. sum-ma-mi a-na-ku
since I
16. uts-ba-te-na eli mati
am perfect (?) over the country
17. sa sarri† û a-na ya-a-si
of the king, and against me

* Determinative prefix.

† *I.e.*, the Egyptian king. The phrase is of frequent occurrence in the Tell el Amarna tablets.

18. in-ni-ip-sa-at
 it has acted;
19. û a-di mi-u-ti maqatu-mi
 and until my death is there fighting.
20. su-ut mu-ul (?)-ka
 As regards thy . . .
21. sa u-sa-at is-tu nakri
 which I brought (?) from the enemy
22. . . -a- . . û us-si-ir
 . . . . and I have sent
23. Bel (?)-bani-la (?) û
 Bel (?)-bani-la (?); and
24. . . ra-bi-ilu-yu-ma-[khir]
 . . rabi-ilu-yuma[khir]
25. [is-ta-] par akhi-su
 has despatched his brother
26. a-na mata an-ni-tam
 to this country
27. a-na [da-na-ni-sa ?]
 to [strengthen it].

## APPENDIX B.

---

THE following notes are from letters of Dr. J. H. Gladstone, F.R.S.

'The five specimens of metallic objects from Tell el Hesy, which you kindly gave me, have been examined in my laboratory with the following results:

'The fragment of a copper or bronze tool from the lowest part of the mound (City Sub I.). This was found to contain no admixture of tin, but it was far from being pure copper. Its low specific gravity, its colour, its brittleness, and its great hardness all show this. It contains a very large proportion of suboxide of copper, occurring partly in small nodules. The analysis gave:

| | |
|---|---|
| Copper - - - - | 94·9 |
| Oxygen - - - - | 2·7 |
| Lead - - - - | 0·68 |
| Iron - - - - - | 0·77 |
| Antimony or tin, chlorine, etc. - | 0·95 |
| | 100·0 |

'This is equivalent to:

| | |
|---|---|
| Metallic copper - - - | 73·6 |
| Cuprous oxide - - - | 24·0 |
| Other substances - - - | 2·4 |
| | 100·0 |

'This is a very interesting result, as it seems to indicate that the makers of these tools were aware of a process by which they could harden their copper so as to make it a good cutting instrument.

'The supposed arrow-head (City IV. or Sub IV.) was exteriorly green, with some red oxide of iron. It was corroded throughout. The proportion of copper to tin was about 9 to 2, and there was a small amount of iron.

'The thick wire (City IV. or Sub IV.) consists practically of pure lead, coated with some carbonate. Analysis showed 98·46 per cent. of lead, with traces of antimony and iron.

'The thinner wire (City IV. or Sub IV.) proved to be silver, which had become coated with chloride of silver, arising no doubt from the chlorides in the soil. There was a notable amount of both copper and gold. An analysis of a portion of the wire gave:

| | |
|---|---|
| Silver - - - - | 89·12 |
| Silver chloride - - - | 1·92 |
| Copper - - - - | 6·50 |
| Gold - - - - | 1·44 |
| Iron - - - - | 0·24 |
| Loss - - - - | 0·78 |
| | 100·0 |

'The piece of bronze from City V. was very much oxidated. Analysis gave 63·4 per cent. of copper, and 7·5 per cent. of tin. It is probable that originally the proportion of copper was larger, as some of the copper may have been dissolved out by the chlorine in the soil. There was no admixture of lead.'

Dr. Gladstone also analyzed a piece of the 'slag' from the blast-furnace (Chapter III.). He says: 'A piece of the slag completely separated from the brick gave the following analysis:

| | |
|---|---|
| Silica | 72·4 |
| Alumina | 11·9 |
| Iron peroxide | 2·7 |
| Lime | 9·22 |
| Magnesia | 2·16 |
| | 98·38 |

In 100 parts.

'I believe the slag is simply fused brick, the structure of the samples being analogous to that of overburnt brick of the present day. It is full of bubbles, arising probably from the carbonic acid expelled by the silica during fusion.'

The absence of tin shown by the analysis of the tool from City Sub I. was so interesting that Dr. Gladstone desired to experiment on another specimen from the same group. His analysis of a fragment of a knife gave practically the same results, which confirm the growing idea of the existence of a Copper Age before the Bronze Age.

## APPENDIX C.

---

While I was examining the remains of City IV. and Sub IV. I had a visit from Professor Alfred E. Day, who has the department of Zoology in the Syrian Protestant College at Beirût. He took away with him specimens of the teeth and shells found at those levels, and has kindly sent me the following note as the result of his studies:

'Among the teeth there were several molars from the right lower jaw of a donkey.

'There were a number of teeth of the buffalo or *jamous* (*Bos bubalis*). Some of these were much worn, indicating a considerable age; others had scarcely more than emerged from the gum.

'There were no teeth which can be positively identified as belonging to ordinary cattle, though there is a horn-core which seems to be that of an ox rather than of a buffalo.

'There are numerous lower and a few upper jaw-bones of goats, most of which, as is shown by the

teeth, belonged to young animals, an indication of their having been killed for food.

'There are the lower jaw of a young pig and several molar teeth of old ones.

'The most striking specimen in the lot is a right lower canine tooth of a hippopotamus. This is somewhat more curved than the one in the college museum, with which I have compared it, but is unmistakable.

'There is the fragment of the eggshell of an ostrich.

'There are also several fish remains, including vertebræ, a piece of the opercular bone of a large fish, still bearing large ctenoid scales, and the fin spine of a large fish.

'There are a number of the shells of the common bivalve, *Pectunculus insubricus,* all perforated at the back, as if having been strung.

'There is also a Nerita (sp. *viridis ?*), which is very much worn and also perforated.

'There is also the left valve of a large Anodonta, of a species which I think is not found in Syria or Palestine, but which is, I think, found in the Nile, my reason for thinking so being that I have recently obtained a shell of the same species which is said to have come from Egypt.

'This last probably, and certainly the ostrich egg and hippopotamus tooth, are proofs of communication with Egypt.'

## APPENDIX D.

---

### NOTES ON THE FLINT IMPLEMENTS OF TELL EL HESY, BY F. C. J. SPURRELL.

THE flint remains brought by Mr. Bliss consist of those which, from the fact that they were rough outsides and ill-shaped pieces, were not put to any use whatever; and of others which are fine pieces of work. The kind of flint used, though coming from rocks of similar age to those of Egypt, was apparently more tractable. Some of the long flakes, for width, length, and thinness are marvels; the regularity of thickness, the length without a curve, and the cleanness of the edges, makes their likeness to ribbons not unreasonable. Both simple unwrought flakes and portions of worked pieces fully show this.

As in Professor Petrie's finds here, no knives or hatchets, and large tools having a complicated system of secondary chipping over the whole surface,

were found in any of the lower layers. Of the larger implements are some to which the term 'scrapers' can be applied; but more properly they are slicks. They are made from wide flat flakes of about a quarter of an inch in thickness, bevelled at an angle of about 45° to a sharp cutting edge. The bevelling is finely done, so as to form an even outline. It is done only from one side in such examples as Fig. 250. Fig. 248 is a wedge-shaped flake, whose thin edge has been similarly bevelled on one side. The two kinds are bevelled for the same reason, viz., that they might cut only in one direction, and were probably used in skinning animals, when the bevelled side of the knife would be placed towards the skin, which it would *not* cut, the effect of the sharp edge on the bones and flesh being of no consequence. The edges of all this kind are in segments of a circle. Another somewhat similar knife, but for a different purpose, is also tabular, and bevelled on two edges which meet in a point. Except in one instance, the edges are bevelled on the same side (see Fig. 249). The figures above given are all of the oldest or lower level.

There are three specimens bearing a rude resemblance to those above described of a later date; but they are neither semicircular nor acutely pointed. None of the foregoing types of implements, though actually in use, show the slightest polish on the edges.

There are a very large number of heavily made sickle teeth; most of them are trimmed roughly at the lower edge and often at the sides (see Figs. 251 to 254); they sometimes exceed half an inch in the thickest part, and were struck from the block in a manner differing widely from the method employed in obtaining the ribbon-like flakes. The ends are squared at an oblique angle to the length, which angle, if not exactly the same in all cases, is very nearly so. All the teeth are denticulated or serrated. The denticulations are made from the smooth side, and are usually primary, though a few show signs of having been touched up between the denticulations. The number of the latter to the inch is commonly eleven or twelve. They are regular in depth, very uniform in the earlier examples, and in character identical with those on the ribbon-like knives.

No woodwork was found in which they could have been set, nor was any gum-resin or setting compound found adhering to them. The line to which the setting extended is, however, visible, as beyond it the flint is polished in almost every specimen. The depth of the flakes is commonly from one and a half to two inches, so that, allowing for the protrusion of a quarter of an inch above the setting, one and a half, and even two, inches were buried in the handle. I have suggested as an explanation of this massive fang, that it may have occupied the place of the

extracted teeth in an actual jaw of some ruminant.

The last and most interesting of these objects are implements fabricated from the fine ribbon-like flakes represented in Figs. 247, 246. The first is a perfect simple flake, the latter one serrated and much used. No. 247 is 7½ inches long, of which 5 inches are perfectly straight. Some of the curved end of No. 246 was trimmed off before use, but it is still 5¾ inches long, and quite straight. The average thickness is less than ⅛ inch in good specimens, and the width over 1 inch. All of these flakes which have been in use were deprived of their irregular ends, and were denticulated on both edges in most cases, and exactly in the style of the sickle teeth. (The indents on Fig. 246 are eleven to the inch.) Almost every specimen has been polished by using; the polish extends from a mere line to one quarter or one third of an inch from the edges. At the end where is seen the bulb of percussion, or in its absence the wider end, the line of polish rapidly thins out, and there is none at the end. The rough surface extends up the middle of the blade, and the lines often thin off at the other end. This looks as if the flakes were set in a handle. If the blade was held by a rib extending along the middle of each side and firmly fastened at either end, there would be an explanation of the unpolished median line.

In other cases it is probable that one edge was set in a handle and reversed when blunted; no two edges equally worn have been found. The denticulations of all the foregoing tools are noticeable as being very fine and even. That they were used as knives there can be little doubt. Many finely worked flakes were found, which had lastly come to baser uses, and with a special variety which has been called in Petrie's 'Tell el Hesy' 'long scraper,' employed to scrape limestone and soft sandstone.

A few long flakes have a curious snub-nosed appearance, by which a sharp edge with great strength is secured at one end; there is reason to suppose that these were employed in secondary chipping of broad blades. The sickle teeth Figs. 257 and 258 are clumsy work, utterly unlike that of earlier date; with these may be classed part of a dagger tooled all over.

It may be well to say that the flake from which No. 250 was made in the fifteenth century B.C. was originally artificial, and of much earlier date. It had already suffered from partial weathering, but not from rough usage, and was perhaps lightly covered by soil. It was probably of palæolithic age.

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